



The Abergelli Power Gas Fired Generating Station Order

10.1.0 Planning Statement

Planning Act 2008
The Infrastructure Planning
(Applications: Prescribed Forms and Procedure) Regulations 2009

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Contents

1	Executive Summary	3
1.1	Overview of the Project and the Application	3
1.2	Relevant Legislative and Policy Framework	4
1.3	Need for and Benefits of the Project	5
1.4	Planning Assessment	6
2	Introduction	8
2.1	Purpose of the Report	8
2.2	Project Overview	9
2.3	The Applicant.....	10
2.4	Legislative and Regulatory Context.....	11
2.5	Composition of the Application.....	12
2.6	Requirement for Other Consents	13
3	Project Context and Project Site Description	14
3.1	The Project	14
3.2	Project Location.....	15
3.3	Power Generation Plant	16
3.4	Gas Connection.....	21
3.5	Electrical Connection.....	21
3.6	Project Stages	22
3.7	Planning History	22
4	The Need for the Project.....	29
4.1	Overview.....	29
4.2	The Need for Flexible Gas Fired Power Station Infrastructure: Policy Context	29
4.3	Discussion	36
5	Planning Policy Context	38
5.1	Overview.....	38
5.2	National Policy Statements	38
5.3	Welsh Planning Policy.....	49
5.4	Local Planning Policy	58
6	Assessment	81
6.1	Introduction.....	81
6.2	National Policy Statements	81
6.3	Welsh Planning Policy.....	117
6.4	Local Planning Policy	121
7	Likely Benefits and Adverse Impacts.....	132
7.1	Introduction.....	132
7.2	Likely Benefits	132
7.3	Likely Adverse Impacts	133

8	Conclusions	135
8.1	Summary	135
	Annexe	137

Figures

Figure 3-1:	Schematic of OCGT Operation	18
Figure 3-2	CCS Application Ref. 2002/0312- Application Site Boundary	23
Figure 3-3	CCS Application Refs 2003/0561, 2004/0415 and 2004/0415 - Application Site Boundary	24
Figure 3-4	CCS Application Ref 2013/0135 – Application Site Boundary.....	25
Figure 3-5	CCS Application Ref 2015/1716 – Application Site Boundary.....	26
Figure 5-1:	Extract from UDP Proposals Map (Map 2: Urban Area East).....	59
Figure 5-2:	Extract from UDP Proposals Map (Key)	60
Figure 5-3	Extract from Draft LDP Proposals Map (Map 13: Mawr)	69
Figure 5-4	Extract from Draft LDP Proposals Map (Legend)	69

Tables

Table 3-1:	Parameters for assessment	19
Table 5-1	CCS LDP Examination Hearings Programme	67
Table 5-2:	SES Themes and Vision	79
Table 6-1	NPS EN-1 Assessment.....	82
Table 6-2	NPS EN-2 Assessment.....	110
Table 6-3	PPW and TANs Assessment	117
Table 6-4:	CCS UDP Assessment	121
Table 6-5	CCS draft LDP Assessment.....	125
Table 6-6	SES Vision and Project Response.....	130

1 Executive Summary

1.1 Overview of the Project and the Application

- 1.1.1 The Applicant for the Project is Abergelli Power Limited (APL), a company registered in England and Wales (Company Number 08190497) and a wholly owned subsidiary of Drax Group PLC (incorporated in England and Wales with number 05562053) (Drax), the ultimate holding company for the Drax group of companies. Drax acquired APL from Watt Power Limited (Watt Power) in 2016.
- 1.1.2 APL proposes to construct, operate and maintain an Open Cycle Gas Turbine (OCGT) peaking power generating station (the Power Generation Plant) and new connections to the gas and electricity networks on land adjacent to the Felindre Gas Compressor Station at Abergelli Farm, Felindre, Swansea, SA5 7NN (the Project).
- 1.1.3 The Project is located on open agricultural land approximately 2 km north of Junction 46 on the M4, approximately 3 km north of the city of Swansea, approximately 1 km southeast of Felindre and 1.4 km north of Llangyfelach. The land upon which the Project would be developed, or which would be required in order to facilitate the development of the Project, is referred to as the Order Land.
- 1.1.4 As the generation capacity of the Power Generation Plant will exceed 50MWe it is classed as a Nationally Significant Infrastructure Project (NSIP) under the Planning Act 2008 (as amended) (PA 2008). As such, APL is applying to the Secretary of State (SoS) for Business, Energy and Industrial Strategy (BEIS) under section 31 of the PA 2008 for a Development Consent Order (DCO) for powers to construct, operate and maintain the Power Generation Plant (the Application). The extent of the works for which Development Consent is sought (together with relevant limits of deviation) is referred to as the Order Limits. In addition, APL is seeking powers of compulsory purchase in respect of acquisition over the Order Land, in order to facilitate the construction and operation of the Project.
- 1.1.5 Separately, APL will seek planning permission for the Gas Connection under the Town and Country Planning Act 1990 (TCPA 1990) and the Electrical Connection under either the TCPA 1990 or as permitted development under the Town and Country Planning (General Permitted Development) Order 1995 (GPDO).
- 1.1.6 The Planning Statement acts as the primary reference document for an explanation of the planning issues pertinent to the Application. It forms part of the suite of documents accompanying the Application submitted in accordance with section 55 of the PA 2008 and Regulation 5 of the APFP Regulations.

1.2 Relevant Legislative and Policy Framework

- 1.2.1 Section 104(2) of the PA 2008 provides that in making decisions on DCO applications, the SoS must (inter alia) have regard to any relevant National Policy Statement (NPS).
- 1.2.2 As set out in NPS EN-1, *“this National Policy Statement, when combined with the relevant technology-specific energy National Policy Statements, provides the primary basis for decisions”* (paragraph 1.1.1) and that the SoS *“should start with a presumption in favour of granting consent to applications for energy Nationally Significant Infrastructure Projects”* (paragraph 4.1.2). The relevant NPSs in the context of the Project are:
- NPS EN-1 – The Overarching National Policy Statement for Energy
 - NPS EN-2 – National Policy Statement for Fossil Fuel Electricity Generating Infrastructure
 - NPS EN-4 – National Policy Statement for Gas Supply Infrastructure (of relevance in respect of the assessment of the Gas Connection only and not directly applicable to the Power Generation Plant to which the DCO Application relates)
 - NPS EN-5 – National Policy Statement for Electricity Networks Infrastructure (of relevance in respect of the assessment and consideration of alternatives for the Electricity Connection only and not directly applicable to the Power Generation Plant to which the DCO Application relates)
- 1.2.3 Section 104 of the PA 2008 also requires the SoS to have regard to any Local Impact Report and other matters which the SoS *“thinks are both important and relevant to the [SoS] decision”*. Relevant UK, Welsh and adopted and emerging local development plan policies and evidence that may assist the SoS’ decision making is set out within section 5 of this Planning Statement.
- 1.2.4 Section 104(3) provides that the SoS must decide applications in accordance with the relevant NPS(s), unless one of a number of prescribed exceptions apply, which includes where the adverse impacts of the proposed development would outweigh its benefits (section 104(7)).
- 1.2.5 APL is undertaking an EIA pursuant to the Infrastructure Planning (Environmental Impact Assessment) Regulations 2009 (EIA Regulations 2009). Therefore, the project is classed as an EIA development.
- 1.2.6 In accordance with section 4.2 of NPS EN-1, the Environmental Statement (ES) (Document Reference 6.1) considers:
- aspects of the environment likely to be significantly affected by the project, including social and economic effects and how any likely significant negative effects would be avoided or mitigated;

- likely significant effects, including any significant residual effects taking account of any proposed mitigation measures or any adverse effects of those measures;
- distinctions between project stages and mitigation measures at those stages; and
- information on how the effects of the Applicant's proposal would combine and interact with the effects of other development (including projects for which consent has been sought or granted, as well as those already in existence).

1.2.7 The draft DCO (Document Reference 3.1), Explanatory Memorandum (Document Reference 3.2), Works Plans (Document Reference 2.3), Land Plans (Document Reference 2.2) and Statement of Reasons (Document Reference 4.1) explain which elements of the proposals are detailed, which remain to be finalised and the parameters for the main plant items.

1.3 Need for and Benefits of the Project

1.3.1 The urgent need for energy generation, including gas fired generating stations and gas fired peaking plants, is set out within NPS EN-1, the Gas Generation Strategy (DECC, 2012), the National Infrastructure Plan (HM Treasury, 2014) and Energy Wales – a Low Carbon Transition (2012). In the Annual Energy Statement (AES) (latest version published in 2014), the Department of Energy and Climate Change (DECC) (now SoS for BEIS) reiterated the need to build new power generation infrastructure and acknowledged the need for gas to feature strongly in the energy mix.

1.3.2 The Project would contribute materially to the short and medium term need for flexible, reliable, peak load power generation and facilitate the transition to a low carbon economy. The chosen technology for a peaking plant would help to 'balance out' the grid at times of peak electricity demand and help to support the grid at times when intermittent renewable sources cannot generate electricity.

1.3.3 The construction and operation of the Project would benefit the local economy. It is projected that the Project will deliver positive socio-economic impacts on the labour market at the construction and decommissioning phases through the creation of local jobs and contribution to Gross Value Added (GVA).

1.3.4 It is further projected that should the construction, decommissioning or operation occur simultaneously with any other projects in the area, that this would provide a positive stimulus to the local economy through the provision of construction-related training and employment opportunities, supply chain linkages and demand for accommodation, food and drink services.

1.4 Planning Assessment

- 1.4.1 The EIA findings, set out within the ES (Document Reference 6.1) and referenced in chapter 6 of this Planning Statement support the overall conclusion that there are no relevant adverse impacts which hold enough significance to outweigh the substantial weight that must be afforded to the Project's contribution towards meeting national energy and climate change policies, including meeting the national need for flexible gas generation.
- 1.4.2 Paragraph 3.1.3 of NPS EN-1 states that all development consent applications for energy infrastructure should be assessed "*on the basis that the Government has demonstrated that there is a need for those types of infrastructure and that the scale and urgency of that need is as described for each of them in this Part.*" Accordingly, the SoS "*should give substantial weight to the contribution which projects would make towards satisfying this need when considering applications for development consent under the Planning Act 2008*" (paragraph 3.1.4, NPS EN-1).
- 1.4.3 The Project will result in some adverse effects, as set out within chapter 16 of the ES (Document Reference 6.1) particularly during construction, in relation to: landscape and visual amenity from a number of viewpoints, traffic during the peak hour, loss of and disturbance to habitats, noise at sensitive receptors, water quality and mineral resources. The Project will also result in some adverse effects during operation, particularly in relation to noise and operational lighting from the Power Generation Plant and landscape and visual amenity from a number of viewpoints. APL has sought to avoid and to minimise adverse effects as far as possible through the design process and through mitigation measures secured as part of the draft DCO or in development consent obligations.
- 1.4.4 The construction of the Project would however also deliver benefits to the local economy, with projected annual delivery of £7.1 million Gross Value Added (GVA) (a measure of the value of goods and services produced) during the construction period, which is expected to commence in 2020. It is projected that 25 to 122 construction workers would be required on site during the peak construction period. The operational phase of the Project would provide up to an estimated 10 FTE direct jobs and provide approximately £0.55m GVA and £0.5m GVA per annum to the local and national economy respectively. The Project will also deliver minor beneficial effects where the previously worked land and known mine workings are stabilised and remediated if required.
- 1.4.5 It is acknowledged that the Project would result in some adverse impacts during construction and operation. However, on the basis of paragraphs 3.1.3 and 3.1.4 of NPS EN-1, and the significant benefits and contribution of the Project towards meeting the urgent need for energy infrastructure, as well as benefits to the local economy, it is considered that the overall balance of factors set out in section 104 of the PA 2008 weighs strongly in favour of the grant of consent for the Project.

- 1.4.6 Having regard to the requirements of section 104 of the PA 2008, and in the absence of sufficient matters to the contrary, there is a compelling case in the public interest for the Order to be made in the terms proposed.

2 Introduction

2.1 Purpose of the Report

2.1.1 This Planning Statement has been produced as part of a suite of documents accompanying APL's Application. The SoS will appoint an Examining Authority (ExA) who will examine it and in turn make a recommendation to the SoS. The decision on whether to grant the Order rests with the SoS.

2.1.2 The Planning Statement acts as the primary reference document for an explanation of the planning issues pertinent to the Project, with regard to the relevant National Policy Statements and other important and relevant matters. The Planning Statement explains how the Project complies with the relevant National Policy Statements and other policy considerations.

2.1.3 A number of other documents in the Application set out design features or mitigation that address relevant planning issues. Where relevant, the Planning Statement cross-refers to these documents to provide further explanation.

2.1.4 The Planning Statement is structured to include:

- An Executive Summary at chapter 1;
- An introduction to the Project, including details of the Applicant, the requirement for Development Consent, and the composition of the Application at chapter 2;
- An explanation of the Project context and description of the Project Site, including a summary of the planning history, at chapter 3;
- An explanation of the need for the Project at chapter 4;
- A summary of the planning policy context relevant to the Project, including reference to relevant planning guidance primarily contained within NPS EN-1 and EN-2, and (in relation to the Gas Connection and Electrical Connection) EN-4 and EN-5, as well as Planning Policy Wales (Edition 9, November 2016) (PPW) and Draft PPW (Edition 10, February 2018) and relevant extant and emerging local planning policy prepared by City and County of Swansea Council (CCS) at chapter 5;
- An assessment of the Project in respect of relevant NPS guidance and other important and relevant considerations at chapter 6;
- An assessment of the likely overall benefits and adverse impacts of the Project at chapter 7; and,

- An overall conclusion to the Planning Statement and the acceptability of the Application in accordance with the decision-making framework established in the PA 2008 at chapter 8.

2.2 Project Overview

- 2.2.1 APL proposes to construct and operate an Open Cycle Gas Turbine (OCGT) peaking power generating station (the Power Generation Plant) and new connections to the gas and electricity networks on land adjacent to the Felindre Gas Compressor Station at Abergelli Farm, Felindre, Swansea SA5 7NN. These elements are referred to as the Power Generation Plant, the Gas Connection, and the Electrical Connection, which together form the Project.
- 2.2.2 The Project is located on open agricultural land approximately 2 km north of junction 46 of the M4 within the administrative boundary of the City and County of Swansea (CCS). The land upon which the Project would be developed, or which would be required in order to facilitate the development of the Project, is referred to as the Order Land.
- 2.2.3 As the generation capacity of the Power Generation Plant would exceed 50MWe it is classed as a Nationally Significant Infrastructure Project (NSIP) under the Planning Act 2008 (as amended) (PA 2008). As such, APL is applying to the SoS for BEIS under section 31 of the PA 2008 for a DCO for powers to construct, operate and maintain the Power Generation Plant (the Application). The works for which development consent is sought in the Application are described in Schedule 1 of the draft DCO and are referred to as the Authorised Development. These works are for the construction and operation of the Power Generation Plant. The extent of the works for which development consent is sought in the DCO (together with relevant limits of deviation) is shown on the Works Plans (Document Reference 2.3) and referred to as the Order Limits.
- 2.2.4 In addition, APL is seeking powers of compulsory acquisition over the Order Land, in order to facilitate the construction and operation of the Project.
- 2.2.5 Drawing No. J0008302-18-200A, contained within the Annexe to this Consultation Report, shows the extent of the Order Land and the Order Limits.
- 2.2.6 Separately, APL will seek planning permission for the Gas Connection under the Town and Country Planning Act 1990 (as amended) (TCPA 1990) and the Electrical Connection under either the TCPA 1990 or as permitted development under the Town and Country Planning (General Permitted Development) Order 1995 (as amended) (GPDO). A planning application is expected to be submitted for the Gas Connection in summer 2018, following EIA screening, and is anticipated to be determined in advance of the determination of the Application. If an application is required for the Electrical Connection following EIA Screening, it is also expected to be submitted in

summer 2018 and is anticipated to be determined in advance of the determination of the Application.

2.3 The Applicant

- 2.3.1 The Applicant is APL, an energy development company established for the Project and recently acquired by Drax Group plc (Drax).
- 2.3.2 Drax is responsible for generating 6% of the UK's electricity, predominantly via Drax power station in Selby. Drax is one of the UK's largest energy producers and is committed to helping to reduce carbon emissions, displacing more coal off the system and providing additional system support to plug the gaps created by intermittent renewables and boost security of supply.
- 2.3.3 Drax acquired APL from Watt Power Limited (Watt Power) in 2016. Stag Energy Development Company Ltd (Stag Energy) previously provided management services to Watt Power in relation to APL.
- 2.3.4 Stag Energy continues to provide resources to APL through a management services agreement. Stag Energy was founded in 2002 and the company draws on a depth of experience within a team that has created and delivered over 10,000 MW of power generation and related infrastructure projects across the globe, of which 2,500 MW has been delivered in the UK.
- 2.3.5 Drax currently has three other power generation projects which have either already been granted consent under or are being brought forward through the PA 2008 process. They are: Progress Power Ltd at Eye Airfield in Suffolk (www.progresspower.co.uk); Hirwaun Power Ltd at Hirwaun in South Wales (www.hirwaunpower.co.uk); and Millbrook Power Ltd in the 'Marston Vale' in Bedfordshire (www.millbrookpower.co.uk). The first two listed projects were granted Development Consent in July 2015. Stag Energy previously provided management services to Watt Power in relation to Progress Power Ltd, Hirwaun Power Ltd and Millbrook Power Ltd.
- 2.3.6 APL is committed to the development of assets to support the UK Government's drive to a low carbon economy. APL recognises the need to balance commercial issues with the environmental benefits and concerns relating to energy projects and believes this balance can be responsibly delivered. The Project would be designed and developed to high quality, safety and environmental standards.
- 2.3.7 Further information on the companies referred to above is provided at www.abergellipower.co.uk or www.drax.com.

2.4 Legislative and Regulatory Context

Development Consent under the Planning Act 2008

- 2.4.1 The process for considering proposed NSIPs was established by the PA 2008 (as amended).
- 2.4.2 The generation capacity of the Power Generation Plant would exceed 50 MWe and would therefore be classified as an NSIP under Section 15 of the PA 2008. Accordingly, Development Consent would be required in accordance with Section 31 of the PA 2008.
- 2.4.3 The examination is a predominantly written process led either by a single appointed person or a panel, who submit a report with their recommendation on an application to the relevant SoS who will take the final decision as to whether to make a DCO for a proposed project and in what terms. The relevant SoS in relation to the Application is the SoS for BEIS.
- 2.4.4 The Gas Connection and Electrical Connection comprise development associated with the NSIP (“associated development”). The PA 2008 restricts associated development for which consent can be sought under a DCO in Wales to development that is associated with a generating station with a capacity in excess of 350 MW. As the Power Generation Plant would have rated electrical output of up to 299 MW, associated development to the Power Generation Plant cannot be included in any application for DCO under the PA 2008. The Application therefore does not seek development consent for the Gas Connection or the Electrical Connection.
- 2.4.5 In addition to seeking development consent for the Power Generation Plant in the draft Order, APL is also seeking powers of compulsory acquisition over the Order Land (which is shown on the Land Plans (Document Reference 2.2)), in order to authorise the acquisition of land, the temporary use of land, the creation of permanent new rights and to suspend, override and extinguish any rights, restrictions, easements or servitudes in order to facilitate the construction and operation of the Project.
- 2.4.6 Development Consent for a NSIP may only be granted by a DCO through an application under Section 37 of the PA 2008 to the SoS.

Wales Act 2017

- 2.4.7 The Wales Act 2017 (WA 2017) will transfer decision-making powers from the SoS (under the PA 2008) to the Welsh Government, in relation to electricity generating stations up to a capacity of 350 MW. However, these provisions have not yet come into force. The date anticipated for devolution of these powers to take effect is 1 April 2019. Accordingly, the consenting regime for the authorised development remains the PA 2008.

EIA Regulations

- 2.4.8 The Infrastructure Planning (Environmental Impact Assessment) Regulations 2009 (the EIA Regulations) require an EIA to be carried out in respect of development that is classed as EIA development. All development in Schedule 1 to the EIA Regulations ('Schedule 1 development') requires an EIA.
- 2.4.9 The definition of a Schedule 1 development includes thermal generating stations with a heat output of 300 MWth¹ or more (Schedule 1 paragraph 2(a)). The thermal output of the Power Generation Plant would be greater than 300 MWth and therefore an EIA will be required under the EIA Regulations.
- 2.4.10 The Project is being assessed under the EIA Regulations and not the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 (EIA Regulations 2017). This is because a scoping opinion was requested from the SoS under the EIA Regulations before the EIA Regulations 2017 came into effect. This means that, in accordance with the transitional arrangements at Regulation 37 of the EIA Regulations 2017, the EIA Regulations will continue to apply to the Project.
- 2.4.11 Section 5(2)(a) of the APFP Regulations requires that any ES required pursuant to the EIA Regulations, together with any scoping or screening opinions or directions, must accompany the Application. Accordingly, an ES (Document Reference 6.1) accompanies this Application.

2.5 Composition of the Application

- 2.5.1 The legislative requirements for applications for a DCO are principally contained in the PA 2008, the APFP Regulations and the EIA Regulations.
- 2.5.2 Section 37 of the PA 2008 governs the content of an application for a DCO, including the requirements for the necessary accompanying documents. These requirements are specified in the Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 (APFP Regulations).
- 2.5.3 The Application complies with the requirements of the PA 2008, the APFP Regulations, the EIA Regulations and applicable SoS and Planning Inspectorate guidance, including Planning Inspectorate Advice Note 6 (Preparation and submission of application documents, February 2016).
- 2.5.4 A full list of all documents provided as part of the Application is set out in the Introduction to the Applicant (Document Reference 1.1.0).

¹ Thermal output is commonly defined as the amount of 'useable heat' which is produced as part of the process of the combustion of fuel. Only a part of this useable heat can be converted to electrical energy, which is why this is a larger value than electrical output.

2.6 Requirement for Other Consents

- 2.6.1 Other consents are required in order for the Project to be constructed and subsequently operated. The details of other consents and licences required and when they would be applied for is contained within the Details of Other Consents and Licenses document (Document Reference 5.4).

3 Project Context and Project Site Description

3.1 The Project

3.1.1 The Project includes:

- **Power Generation Plant** in the form of an OCGT peaking power generating station, fuelled by natural gas and capable of providing a rated electrical output of up to 299 Megawatts (MW). The Power Generation Plant comprises:
 - The **Generating Equipment** including one Gas Turbine Generator with one exhaust gas flue stack and Balance of Plant (BOP) (together referred to as the Generating Equipment) which are located within the Generating Equipment Site;
 - An **Access Road** to the **Generating Equipment Site** from the B4489 which lies to the west, formed by upgrading an existing access road between the B4489 junction and the Swansea North Substation (the Substation) and constructing a new section of access road from the Substation to the Generating Equipment Site;
 - A temporary construction compound for the storage of materials, plant and equipment as well as containing site accommodation and welfare facilities, temporary car parking and temporary fencing (the Laydown Area). A small area within the Laydown Area will be retained permanently (the Maintenance Compound);
 - Ecological Mitigation Area – area for ecological enhancement within the Project Site boundary.
 - Permanent parking and drainage to include: a site foul, oily water and surface water drainage system.
- A new **Gas Connection**, in the form of a new above ground installation (AGI) and underground gas pipeline connection (the Pipeline), to bring natural gas to the Generating Equipment from the National Gas Transmission System; and
- A new **Electrical Connection** in the form of an underground electrical cable to export power from the Generating Equipment to the National Grid Electricity Transmission System (NETS).

3.1.2 The Power Generation Plant, Gas Connection and Electrical Connection are together referred to as the Project. The Generating Equipment, Laydown

Area, Access Road, Ecological Mitigation Area and permanent parking and drainage are together known as the 'Power Generation Plant'.

3.2 Project Location

Project Site

- 3.2.1 The Project Site comprises approximately 35 hectares (ha) (74.1 acres) and is located on open land approximately 2 km north of Junction 46 on the M4, approximately 3 km to the north of Swansea, approximately 1 km south-east of Felindre, and 1.4 km north of Llangyfelach.
- 3.2.2 The current land use is predominantly agricultural, with sheep and horse grazing. The Project Site is adjacent to the Substation (comprising a 400kV and 132 kV substation) and encompasses the existing access road leading to the Substation and Felindre Gas Compressor Station from the B4489.
- 3.2.3 Most of the Project Site is improved grassland but there are areas of marshy grassland in the south eastern part of the Generating Equipment Site. There are parts of a Site of Importance for Nature Conservation (SINC) within the Project Site (Lletty Morfil SINC). A block of broadleaved woodland, classified as Ancient Woodland, and a SINC lie to the east. There are also further blocks of Ancient Woodland, also classified as SINC, to the west surrounding the Substation, Felindre Gas Compressor Station, and the existing access road leading to these facilities from the B4489.
- 3.2.4 Within the Project Site there are springs, with their associated streams and drainage ditches which discharge into the Afon Llan. The Afon Llan links with the Afon Lliw and the River Loughor, which discharges into the Bristol Channel. There are no Main Rivers within the Project Site.
- 3.2.5 Ground levels at the Project Site vary from approximately 146 m above ordnance datum (AOD) at the highest point in the north-west corner at Rhyd-y-pandy Road to approximately 80 m AOD along the southern perimeter, with ground levels generally falling in a southerly and south easterly direction. The land within the Generating Equipment Site is at approximately 90 m AOD.

Generating Equipment Site

- 3.2.6 The Generating Equipment Site is located primarily within fields used for grazing, bounded by a mixture of drainage ditches, fencing and poor quality hedgerows with substantial gaps in them. The Generating Equipment Site and Laydown Area are both crossed by a soft surface horse training track known as 'the gallops', which runs diagonally north-west to south-east.
- 3.2.7 The Generating Equipment Site is accessed from Junction 46 of the M4. From the M4 vehicles would travel north via the B4489, then head east utilising the existing access road from the B4489, followed by a newly constructed section of Access Road leading south from the Felindre Gas

Compressor Station, then crossing east over agricultural land to reach the Generating Equipment Site.

- 3.2.8 The maximum area for the Generating Equipment Site would be approximately 2.64 ha.

Surrounding Area

- 3.2.9 The surrounding area is at present predominantly rural in character, although there is the Felindre Park and Share facility to the south and a substantial amount of utility infrastructure in the area.
- 3.2.10 The National Gas Transmission System, a Water Main and a decommissioned oil pipeline cross the Project Site and there is also a network of electricity pylons, underground utilities and overhead lines which are routed to and from the Substation. The Felindre Water Treatment Works is located to the northwest, while the Cefn Betingau Solar Park and Abergelli Solar Farm are located to the east of Project Site. A further two solar parks are located in the vicinity at Rhyd-y-pandy solar park and Abergelli Farm.
- 3.2.11 Other features of the area include public footpaths, bridleways and tracks located in and around the Project Site, linking it to the wider area. The closest residential dwellings are: Maes-eglwys (approx. 440 m south-east of the Generating Equipment Site), Llwynhelig (approx. 590 m to the south east of the Generating Equipment Site), Abergelli Farmhouse (approx. 620 m to the north of the Generating Equipment Site), Cefn betingau (approx. 650 m east of the Generating Equipment Site), Lletty Morfil Farm (approx. 740 m north of the Generating Equipment Site) and Felin Wen Farm (approx. 830 m to the east of the Generating Equipment Site).

3.3 Power Generation Plant

- 3.3.1 The Power Generation Plant comprises the Generating Equipment, Access Road, Laydown Area, Maintenance Compound, Ecological Mitigation Area and parking and drainage.

Generating Equipment

- 3.3.2 The Generating Equipment is an Open Cycle Gas Turbine (OCGT) peaking power generating station, fuelled by natural gas and capable of providing a rated electrical output of up to 299 MW.
- 3.3.3 A peaking plant which is designed to operate when there is a surge in demand for electricity associated with a particular stress event (e.g. where there is a sudden demand in power required by consumers or a sudden drop in power being generated by plants which are constantly operational such as a sudden outage).
- 3.3.4 An 'industrial' type gas turbine would be used for the Project. This type of turbine has been selected as it is suited to generating up to 299 MW using

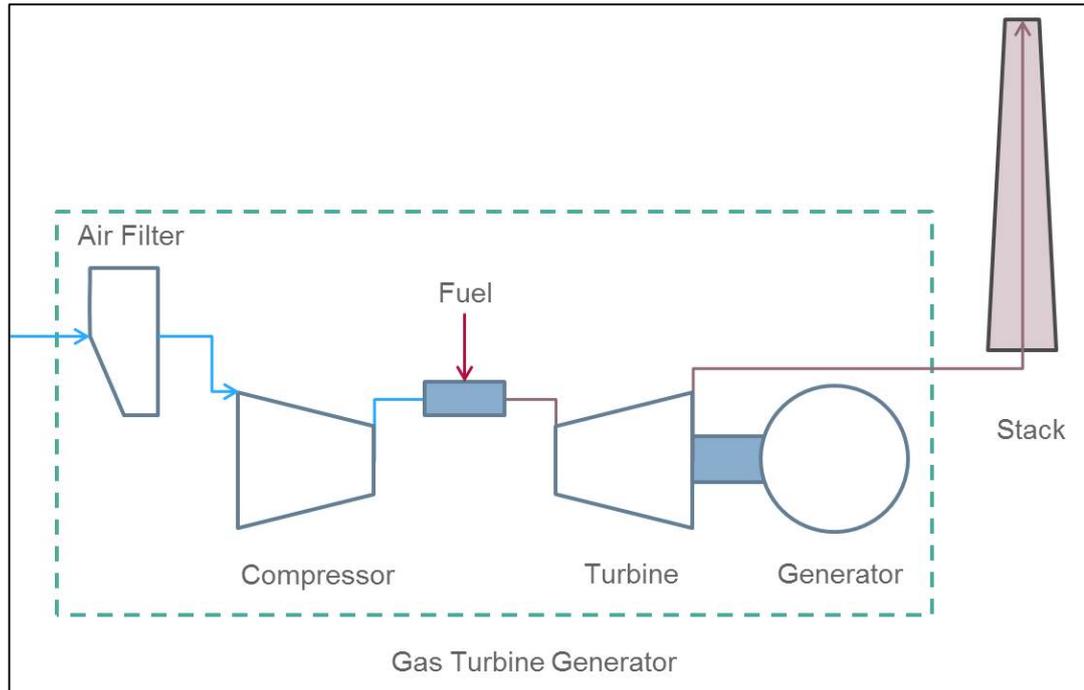
only one unit, thereby reducing potential effects of noise, air quality and visual impacts. Additionally, they are suitable for frequent and fast start-ups, flexibility, and high-availability maintenance techniques.

3.3.5 The main equipment in an OCGT is a Gas Turbine Generator, including the following components:

- Air inlet filter house;
- Air inlet duct;
- Exhaust diffuser; and
- Auxiliaries, including:
 - Lube oil system;
 - Air dryers;
 - Fuel gas filter package;
 - Instrument air system;
 - Compressor washing; and
 - A stack with an exhaust silencer would also be part of the OCGT.

3.3.6 Figure 3-1 shows a simple schematic of an OCGT operation.

Figure 3-1: Schematic of OCGT Operation



3.3.7 In addition to the single Gas Turbine Generator at the Generating Equipment Site, the following plant and buildings will be present:

- Raw / Fire Water Tank: The fire water storage tank would be designed to comply with the relevant fire regulations and would be installed together with fire pumps, hose reels, fire hydrants and portable extinguishers;
- Demineralised Water Tank: Required to store demineralised water for the Generating Equipment (used for e.g. blade washing);
- Control Room / office / workshop Building: Required in order to monitor the plant operation and house plant controls;
- Gatehouse: Needed to provide security and maintain a log of site attendance, deliveries etc.;
- Transformer Compound: Required to connect the electrical infrastructure from the Generating Equipment to transformers before export to the Substation which is part of the NETS. This would also include a generator step-up transformer, unit and other transformers, an overhead line gantry and associated equipment;
- Natural Gas Receiving Station: Required to ensure that gas coming from the National Gas Transmission System feeds into the Generating Equipment Site at the right flow and pressure conditions. This would include a compression station, emergency generator, Joule-Thompson boilers and auxiliary control cabinets;

- Fin-Fan Coolers to provide cooling to the Generating Equipment;
- Telemetry apparatus including electrical cabinets; and
- Emergency Generator: A small diesel fired generator to provide power for the safe shutdown of the Gas Turbine Generator and running of essential security systems in emergency situations

3.3.8 Table 3-1 provides indicative dimensions for the main plant items which would be present at the Generating Equipment Site.

Table 3-1: Parameters for assessment

Building or Structure	Maximum Height (m)	Minimum Height (m)	Maximum Length (m)	Maximum Width (m)
Gas Turbine Generator (including gas turbine, generator, air inlet filter house, air inlet duct, exhaust diffuser, and auxiliaries such as lube oil system, air dryers, fuel gas filter package, instrument air system, compressor washing) (Work No 1A)	27	-	50	40
Exhaust gas emission flue stack (Work No 1A)	45	35	-	12
Control room/office/workshop (Work No 1B)	7	-	45	25
Emergency Generator (Work No 1B)	6	-	13	5
Gas receiving station (including compression station, emergency generator, Joule-Thompson boilers and other auxiliary control cabinets) (Work No 1C)	10	-	70	50
Gatehouse (Work No 1E)	4.5	-	9	8
Demineralised water tank (Work No 1B)	7	-	7	7

Building or Structure	Maximum Height (m)	Minimum Height (m)	Maximum Length (m)	Maximum Width (m)
Fire water tank (Work No 1B)	15	-	15	15
Above ground installation (AGI)*	3	-	85	35
Minimum offtake connection (MOC)*	3	-	35	30
Gas Pipeline inspection gauge facility *	3	-	35	35
Fin Fan Coolers (Work No 1A)	10	-	28	14
Transformer compound (including generator step up transformer, unit and other transformers, connection to underground cable and associated equipment.) (Work No. 1D)	15	-	65	60

Access Road

- 3.3.9 A new purpose built Access Road to the Generating Equipment Site from the B4489 would be formed by upgrading an existing access road between the B4489 junction and the Swansea North Substation and construction of a new section of road from the Substation to the Generating Equipment Site.
- 3.3.10 The existing access road between the B4489 junction and the Substation would be used. Two trees currently sited at the northern edge of the road would need to be removed to facilitate the passing of abnormal load(s).
- 3.3.11 The existing National Grid car park is unaffected by the route of the Access Road but may be used as initial temporary laydown whilst the construction of the new section of road commences.

Laydown Area

- 3.3.12 A temporary Laydown Area during construction would be provided for the storage of materials, plant and equipment as well as containing site accommodation and welfare facilities, temporary car parking and temporary fencing. The Laydown Area would be provided adjacent to the Generating Equipment Site. A small permanent area within the Laydown Area is required

for maintenance during the operational phase of the Project (the Maintenance Compound).

Ecological Mitigation Area

- 3.3.13 An area has been allocated within the Order Limits as mitigation for any habitat loss from permanent land take resulting from the construction and operation of the Project.

Car Parking

- 3.3.14 During construction, adequate car parking would be provided within the Laydown Area. During operation car parking for operational and maintenance staff would be provided within the Generating Equipment Site. The Project would take into account CCS's policy on parking standards during the operational phase of the Project and implement sustainable transport methods where possible.

Drainage

- 3.3.15 The Project would require a site foul water drainage system, and an oily water drainage system. A surface water drainage system would also be required to adequately drain the site and prevent ponding.
- 3.3.16 To prevent inundation of the Project Site from surface runoff, cut off drainage ditches would be placed around the uphill site perimeter.

3.4 Gas Connection

- 3.4.1 The Gas Connection would comprise all the necessary elements to enable gas to be imported to the Generating Equipment at a suitable rate and pressure to produce up to 299 MW, including a Gas Pipeline and AGI.
- 3.4.2 The Gas Connection would be in the form of a new AGI and underground Gas Pipeline, which is required in order to connect the Generating Equipment to the existing National Gas Transmission System so as to provide a reliable supply of fuel.
- 3.4.3 As explained at section 2.4, the Application does not seek development consent for the Gas Connection.

3.5 Electrical Connection

- 3.5.1 The Electrical Connection would comprise all the necessary elements to enable power to be exported from the Generating Equipment to the NETS. The connection would be approximately 900 m in length. It would consist of a 400 kV underground cable to the Substation and associated works inside the Substation to connect to a gas-insulated switchgear (GIS) bay.
- 3.5.2 As explained at section 2.4, the Application does not seek development consent for the Electrical Connection.

3.6 Project Stages

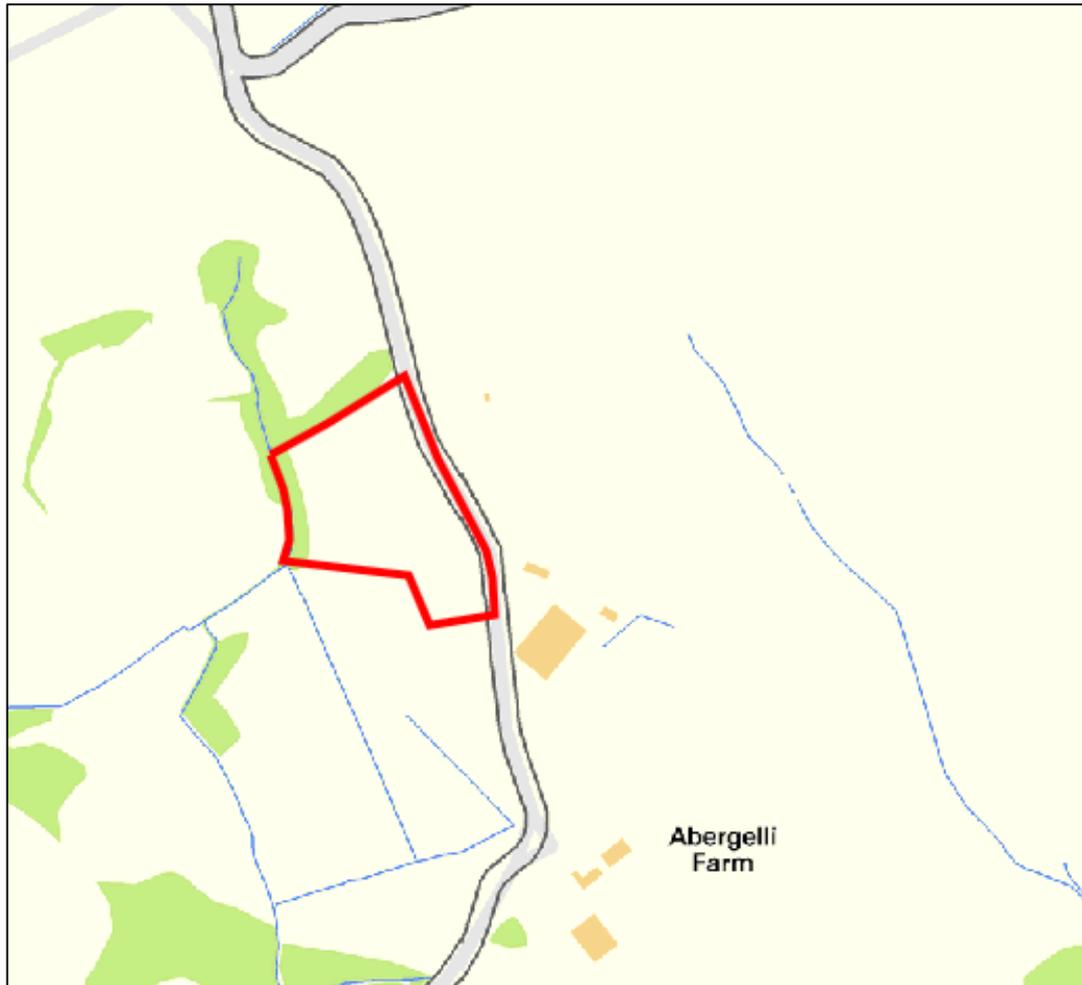
- 3.6.1 The ES (Document Reference 6.1) describes the project stages in line with NPS EN-1 paragraph 4.2.3, which are summarised below.
- 3.6.2 Construction and commissioning of the Project would take approximately 22 months starting in 2020.
- 3.6.3 The main works associated with the construction phase would be excavation and site levelling for new foundations, piling (if required) and the laying of the Gas and Electrical Connections, as well as erection of the Generating Equipment.
- 3.6.4 The plant is expected to operate for up to 2,250 hours per year and 1,500 running hours rolling average over 5 years, supporting National Grid during periods of peak demand and system stress.
- 3.6.5 The Generating Equipment would be designed to have an operational life of 25 years. It is assumed that the above ground Generating Equipment would be demolished and removed after 25 years and the Generating Equipment Site re-instated. Any decommissioning phase would be likely to be of a similar duration to construction i.e. 22 months. The detail of future decommissioning would be determined following submission of a decommissioning strategy for approval by CCS under a requirement of the DCO.

3.7 Planning History

Project Site

- 3.7.1 Abergelli Farm has previously been subject to a series of planning applications for mineral extraction, an electricity generation facility, inert landfill and other commercial activities.
- 3.7.2 Swansea City Waste Disposal Company Ltd gained planning permission for the excavation and removal of inert material from landfill site and restoration at Abergelli Farm in February 2003 (CCS Ref: 2002/0312), approx. 100 m to the west of the Project Site (see application boundary in Figure 3-2). An application to amend Condition 1 of this consent to allow the excavation and removal of inert material until 31st December 2010 (2007/0907) was submitted in December 2007, however the application was undetermined and the works have ceased.

Figure 3-2 CCS Application Ref. 2002/0312- Application Site Boundary



- 3.7.3 In May 2003, planning permission was granted for the change of use of land at Abergelli Farm from agricultural use to a horse racing training/facility ground (CCS Ref: 2003/0561), adjacent to the west of the Project Site (see application boundary in Figure 3-3). Subsequently, CCS granted outline planning permission at this site for the construction of a stable block in August 2004 (CCS Ref: 2004/0415) and for the construction of two detached dwelling houses to provide Horse Trainers and Stable Hands accommodation (CCS Ref: 2004/0329). This permission has been implemented and remains operational.

Figure 3-3 CCS Application Refs 2003/0561, 2004/0415 and 2004/0415 - Application Site Boundary



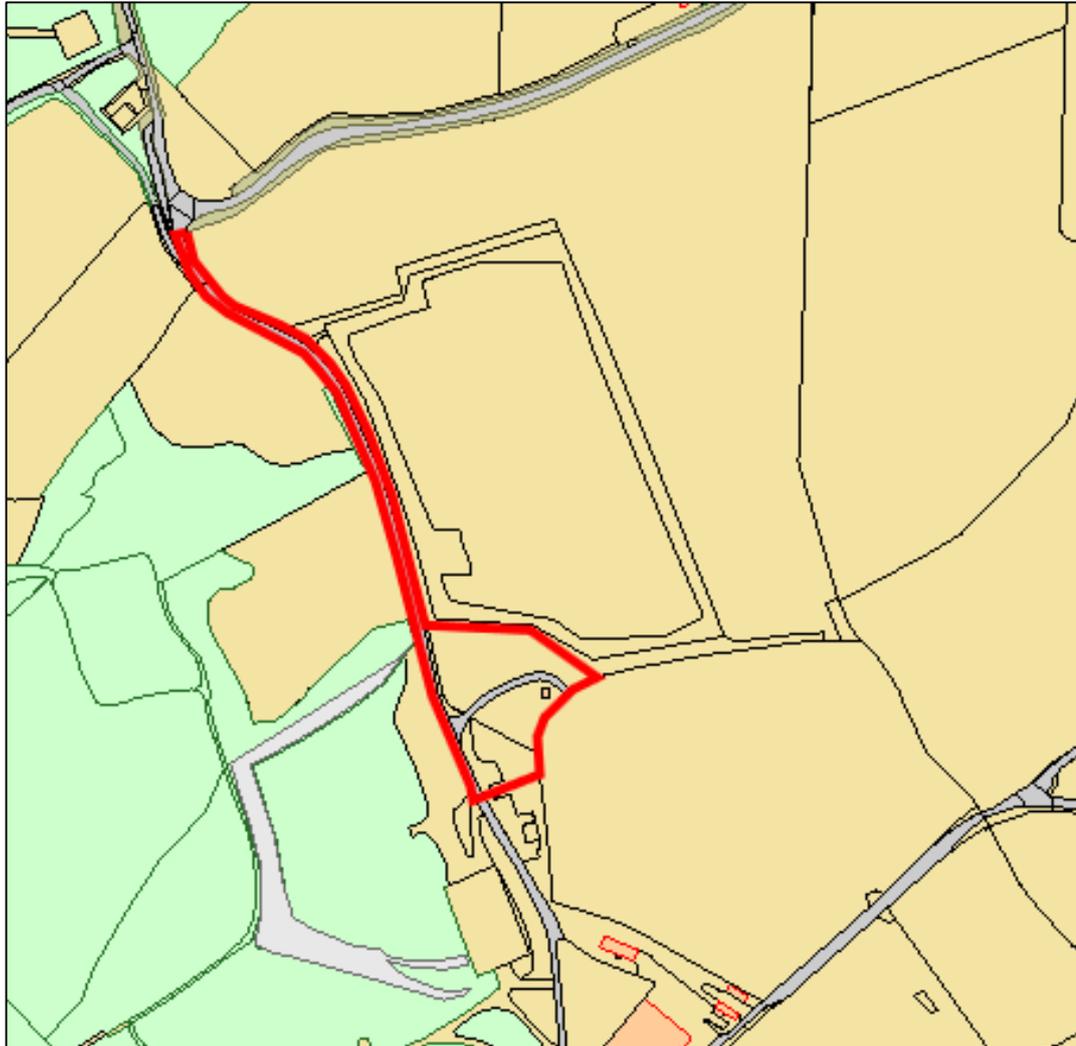
3.7.4 Abergelli Glas Ltd gained planning permission for a 10 MW solar farm, inverter substations and 2.4m high fencing at land at Abergelli Farm, adjacent to the north-east of the Project Site (see application boundary in Figure 3-4), in May 2013 (CCS Ref: 2013/0135). This consent has since been the subject to a number of Non-Material Amendment (NMA) applications. An NMA was first submitted to reduce the number of buildings, solar panels, height of fence, height of framework and to omit the met mast (CCS Ref: 2014/1313/NMA), and was granted permission on 28/10/2014. A subsequent application was submitted in September 2014 (2014/1335/DOC) seeking to discharge condition 5 of permission 2013/0135. The application was granted in December 2014. The consent for the solar farm has been implemented and the solar farm is operational.

Figure 3-4 CCS Application Ref 2013/0135 – Application Site Boundary



- 3.7.5 In October 2015, planning permission was refused for an *“Emergency standby electricity generation facility comprising: modern modular diesel generator units (up to 14 in total), transformers, diesel storage tanks, boundary treatment including acoustic screening, access improvements and associated works”* at land adjacent to the west of the Project Site (see application boundary in Figure 3-5) (CCS Ref: 2015/1716). The application was refused on the basis that, in the Council’s view, the positive benefits of the development would not outweigh the visual harm to the countryside caused by it.

Figure 3-5 CCS Application Ref 2015/1716 – Application Site Boundary



Surrounding Area

- 3.7.6 The area surrounding Abergelli Farm is predominantly rural but is characterised by a substantial amount of utilities and energy infrastructure.
- 3.7.7 In August 2008, National Grid Electricity Transmission PLC gained planning permission for the construction of a new 400kV electricity substation at land adjacent to the Project Site, at Heol Llangyfelach in Felindre (CCS Ref: 2007/2733). The substation incorporated a gas insulated switchgear (GIS) building with separate super grid transformers (SGT), associated infrastructure works and a sealing end compound. Subsequently, the proposals were modified and planning permission was granted for the amended scheme in November 2008 (CCS Ref: 2008/1685) with the GIS building to be 60m long x 15m wide x 13.5m high. In association with the 400kV electricity substation, planning permission was granted for an overhead electricity line diversion in April 2008 (CCS Ref: 2007/2827). In July 2010 an amendment to the November 2008 permission (CCS reference

- 2008/1685) was granted relating to the construction of an amenity building (CCS Ref: 2010/0539). The permission has been implemented.
- 3.7.8 Good Energy Brynwhilach Solar Park Ltd gained planning permission in November 2014 for the construction of a 12.69 MW solar park at land at Brynwhilach, Felindre Road, adjacent to the southern boundary of the Project Site (CCS Ref: 2014/1022). The solar park consists of up to 47,000 PV panels, 8 inverter/transformer stations, 2 substations, storage container, new access tracks, and security fencing. Several non-material amendment applications have recently been granted including amendments to the height and slope of the panels, amendments to the design of substations and storage containers, relocation of the compound area and security fencing, the use of less fields, a reduction in the solar arrays, and a reduction in the number of transformer stations to 4. Pre-commencement conditions have been discharged (CCS Refs 2015/1987 & 2017/0507/DOC) indicating that the permission has been implemented. A 9 MW solar park, consisting of 135,000 PV panels, 9 inverter/transformer cabins and a single control building at land at Cefn Betingau Farm, approximately 1.5 km to the south-east of the Project Site, was granted planning permission in August 2013 (CCS Ref: 2013/0865). Several condition applications have been discharged relating to this application (CCS Ref. 2013/1739, 2015/0617 & 2015/0807). Several non-material amendment applications have also been submitted including an application to replace fencing, and an application granted in January 2017, for amendments to Swales, layout, fencing and access, and installation of a storage container and satellite system. (CCS Ref. 2016/3484/NMA). The permission has been implemented and the solar farm is operational.
- 3.7.9 In October 2006, the Welsh Development Agency gained outline planning permission for a strategic business park at Felindre, approximately 500m to the south of the Project Site, to accommodate emerging industries, high-tech manufacturing and high level services (CCS Ref: 2006/0773). Condition 3 of this permission was subsequently varied by planning application 2009/1520, (approved in January 2010) to extend the time period for the submission of the reserved matters by a further two years. Planning application 2011/1143, approved in October 2011 sought to vary conditions 1 and 3 of outline planning permission 2006/0773, to include the internal highway infrastructure as a reserved matter and to allow for the phased submission of the reserved matters in accordance with the programme of phasing to be approved under condition 5 of the permission. Planning permission was granted in November 2012 for reserved matters (in part) of the means of access and spine access road together with associated infrastructure, plot layout and the strategic landscaping (CCS Ref. 2012/1035). This permission has been implemented.
- 3.7.10 In January 2008, temporary planning permission was granted for the use of Felindre Business Park for a period of 18 months for the formation of a park and ride facility for DVLA staff (CCS Ref: 2007/2513). This permission was extended for a temporary period until September 2013 (CCS Ref: 2009/1585; CCS Ref: 2011/1311). The extent of the DVLA park and ride facility was

subsequently extended and granted temporary planning permission in November 2012 (CCS Ref: 2012/0884), August 2014 (CCS Ref: 2014/0913) and October 2016 (CCS Ref. 2016/1270). The DVLA park and ride facility is still in use and the current temporary planning permission expires in October 2018.

- 3.7.11 In July 2014, planning permission was granted for the construction of a park and ride / share car park (approximately 480 spaces) at land to the east of Felindre Business Park, approximately 500 m to the south of the Project Site (CCS Ref: 2013/1835). The development comprised new vehicular access, security office, toilet, engineering and associated works, including lighting, fencing, drainage attenuation and landscaping. The park and ride (Felindre Park and Ride) has been built and is operational.
- 3.7.12 Planning permission was granted in November 2013 for the installation of four 5 kW wind turbines (120.7 m in height to blade tip) and associated infrastructure at Myle Coch Mawr, approximately 5.7 km from the Project Site (CCS Ref: 2013/0795). Pre-commencement conditions have not been discharged and it is understood that the permission has not been implemented.
- 3.7.13 Planning permission was granted in November 2013 for the installation of 16 wind turbines (maximum height to blade tip of 127 m with a hub height of 80 metres), with a maximum generating capacity of 48 MW, associated tracks and ancillary infrastructure at Mynydd y Gwair, approximately 6.4 km from the Project Site (CCS Ref: 2013/1221 & 2012/1221). The permission has been implemented.
- 3.7.14 Planning permission was granted in November 2014 for a 6 MW solar park at Gelliwern Isaf farm, approximately 2.7 km from the Project Site (CCS Ref. 2014/0739). Conditions have been discharged (CCS Refs. 2015/0006, 2015/0020 & 2015/1105) and two non-material amendments have been made to the original consent (CCS Refs. 2015/0097 & 2015/1106). The permission has been implemented and the solar farm has been built.
- 3.7.15 Planning permission was granted on appeal on the 10th May 2016 for a 4.9MW solar park including photovoltaic panels, four inverter stations, centre station and associated works (CCS Ref. 2015/1529) at Llettyr Morfil Farm, directly to the south-west of the Project Site. Pre-commencement conditions have since been discharged (CCS Ref. 2015/1529) to facilitate commencement. This permission has been implemented.

4 The Need for the Project

4.1 Overview

4.1.1 This chapter sets out why the Project is needed, as a viable proposal to contribute towards greater reliability of electricity supply in the UK. Given that this Planning Statement provides confirmation that, in APL's view, the adverse impacts of the Project do not outweigh its benefits (see the test set out in s104(7) of the PA 2008), it is important to consider the need for the Project (and the NPS position on need for nationally significant energy projects more generally).

4.2 The Need for Flexible Gas Fired Power Station Infrastructure: Policy Context

National Policy Statements (NPSs)

4.2.1 When determining an application for a DCO the SoS must have regard to, inter alia, any relevant NPSs designated in respect of that type of infrastructure (s.104 of the PA 2008). S104(3) makes clear that the SoS must decide an application in accordance with any relevant NPS, except to the extent that particular circumstances apply (including where the SoS is satisfied that the adverse impact of a development would outweigh its benefits).

4.2.2 The overarching NPS for Energy is NPS EN-1, which sets out national policy for energy infrastructure and explains the UK-wide need for such infrastructure. This, along with NPS EN-2 (National Policy Statement for Fossil Fuel Electricity Generating Infrastructure) comprises the suite of relevant NPSs for this Application.

4.2.3 EN-4 (National Policy Statement for Gas Supply Infrastructure) and EN-5 (National Policy Statement for Electricity Networks Infrastructure) are also of relevance due to the associated Gas Connection and Electrical Connection.

Overarching National Policy Statement for Energy (EN-1)

4.2.4 Section 3 of NPS EN-1 re-affirms the transitional role of new gas generation, confirms that a diverse energy mix is required and that there is a significant need for new energy generation infrastructure to replace capacity that would be lost through the closure of existing large coal plants under the Large Combustion Plant Directive. Indeed, it states that the decision-maker *"should start with a presumption in favour of granting consent to applications for energy NSIPs"* (paragraph 4.1.2).

4.2.5 Paragraph 3.1.3 of NPS EN-1 states that the SoS should *"assess all applications for development consent for the types of infrastructure covered by the energy NPSs on the basis that **the Government has demonstrated that there is a need for those types of infrastructure and that the scale***

and urgency of that need is as described for each of them in this Part...
[emphasis added].

- 4.2.6 Paragraph 3.1.4 of NPS EN-1 states that *“The [SoS] should give **substantial weight to the contribution which projects would make towards satisfying this need when considering applications for development consent under the Planning Act 2008**”* [emphasis added].
- 4.2.7 Paragraph 3.3.1 of NPS EN-1 acknowledges that, *“Electricity meets a significant proportion of our overall energy needs and our reliance on it is likely to increase...”*
- 4.2.8 Paragraphs 3.3.2 – 3.3.6 of NPS EN-1 explain the need to meet energy security and carbon reduction objectives.
- 4.2.9 Paragraph 3.3.4 of NPS EN-1 acknowledges that, *“There are benefits of having a diverse mix of all types of power generation. It means we are not dependent on any one type of generation or one source of fuel or power and so helps to ensure security of supply.”* It acknowledges that different types of electricity generation can complement each other as *“fossil fuel generation can be brought on line quickly when there is high demand and shut down when demand is low, thus complementing generation from nuclear and the intermittent generation from renewables.”*
- 4.2.10 Paragraph 3.3.5 of NPS EN-1 states that: *“The UK is choosing to largely decarbonise its power sector by adopting low carbon sources quickly. There are likely to be advantages to the UK of maintaining a diverse range of energy sources so that we are not overly reliant on any one technology (avoiding dependency on a particular fuel or technology type).”*
- 4.2.11 Paragraph 3.3.7 of NPS EN-1 states that: *“In the UK at least 22 GW of existing electricity generating capacity will need to be replaced in the coming years, particularly to 2020. This is a result of tightening environmental regulation and ageing power stations.”*
- 4.2.12 Paragraphs 3.3.10 – 3.3.12 of NPS EN-1 explain the need for more electricity capacity to support an increased supply from renewables.
- 4.2.13 Paragraph 3.3.11 of NPS EN-1 acknowledges that the more renewable generating capacity we have the more generation capacity we will require overall, and explains that *“If fossil fuel plant remains the most cost-effective means of providing such back-up, particularly at short notice, it is possible that even when the UK’s electricity supply is almost entirely decarbonised we may still need fossil fuel power stations for short periods when renewable output is too low to meet demand, for example when there is little wind.”*
- 4.2.14 Paragraphs 3.3.15 – 3.3.24 of NPS EN-1 explain the urgency of the need for new electricity capacity.

- 4.2.15 Paragraph 3.3.22 of NPS EN-1 describes the total electricity demand anticipated in 2025, and acknowledges that 33 GW of the new capacity by 2025 would need to come from renewable sources, and that it would be for the industry to determine the exact mix of the remaining 26 GW new non-renewable electricity capacity, activating within the strategic framework set by the Government. This paragraph states that, *"based on the UEP high fossil fuel and carbon price scenario, the UK would need at least 113 GW of total electricity generating capacity (compared to around 85 GW now), of which at least 59 GW would be new build."*
- 4.2.16 Paragraph 3.3.23 of NPS EN-1 states that, *"To minimise risks to energy security and resilience, the Government therefore believes it is prudent to plan for a minimum need of 59 GW of new electricity capacity by 2025"*.
- 4.2.17 Paragraph 3.6.1 of NPS EN-1 confirms that gas generation will play an important role in the UK's energy mix, stating *"Fossil fuel power stations play a vital role in providing reliable electricity supplies: they can be operated flexibly in response to changes in supply and demand, and provide diversity in our energy mix. They will continue to play an important role in our energy mix as the UK makes the transition to a low carbon economy..."*.
- 4.2.18 Paragraph 3.6.2 of NPS EN-1 gives specific reference to the role of gas in providing flexibility to energy supply. It states that *"Fossil fuel generating stations contribute to security of energy supply by using fuel from a variety of suppliers and operating flexibly. Gas will continue to play an important role in the electricity sector – providing vital flexibility to support an increasing amount of low-carbon generation and to maintain security of supply"*.
- 4.2.19 Paragraph 3.6.8 of NPS EN-1 explains the need for fossil fuel generation, and states that although fossil fuel capacity may be replaced by new nuclear and renewable generating capacity in due course, *"...it is clear that there must be some fossil fuel generating capacity to provide back-up for when generation from intermittent renewable generating capacity is low and to help with the transition to low carbon electricity generation"*.
- 4.2.20 Paragraph 3.7.7 of NPS EN-1 acknowledges that *"The urgency of need for new generating capacity means that the need for new transmission infrastructure that is required to connect that capacity will be similar."* Paragraph 3.7.10 adds that *"...there is an urgent need for new electricity transmission and distribution infrastructure..."* and *"...the need for any given proposed new connection or reinforcement has been demonstrated if it represents an efficient and economical means of connecting a new generating station to the transmission or distribution network..."*.
- 4.2.21 Paragraph 3.8.19 of NPS EN1 explains that gas is likely to continue to be a central part of the national energy mix during the transition to a low carbon economy, particularly *"...in the power generation sector, as a reliable source of flexible power generating capacity, to back-up intermittent renewables, so underpinning security of supply and price stability in the electricity market..."*

- 4.2.22 NPS EN-1 therefore establishes the general need case for energy NSIPs, including energy produced by gas generation.

National Policy Statement for Fossil Fuel Electricity Generating Infrastructure (EN-2), National Policy Statement for Gas Supply Infrastructure and Gas and Oil Pipelines (EN-4) and National Policy Statement for Electricity Networks Infrastructure (EN-5)

- 4.2.23 Paragraph 1.1.1 of NPS EN-2 further emphasises that *“Fossil fuel generating stations play a vital role in providing reliable electricity supplies and a secure and diverse energy mix as the UK makes the transition to a low carbon economy....”*
- 4.2.24 NPS EN-2, NPS EN-4 and NPS EN-5 do not repeat or add to the needs case set out in NPS EN-1, but provide additional policy criteria and assessment principles relevant to fossil fuel generating stations. Notably, paragraph 2.2.1 of EN-2 states that: *“...the Government does not seek to direct applicants to particular sites for fossil fuel generating stations”*.
- 4.2.25 Paragraph 2.1.2 of both NPS EN-4 and NPS EN-5 state separately that, in light of the Government’s conclusion that there is a significant need for new major energy infrastructure generally, as set out in NPS EN-1, the SoS *“should act on the basis that the need for the infrastructure covered by this NPS has been demonstrated.”*
- 4.2.26 Paragraph 2.19.1 of NPS EN-4 recognises that gas pipelines *“provide an important transport mechanism for natural gas, petrol, gas oil, heating oil, diesel and aviation fuel.”*
- 4.2.27 Paragraph 1.1.1 of NPS EN-5 states, *“The new electricity generating infrastructure that the UK needs to move to a low carbon economy while maintaining security of supply will be heavily dependent on the availability of a fit for purpose and robust electricity network.”*

Other Government Policy

- 4.2.28 The NPSs inform, and have been informed by, other government policy and evidence as to the need for viable proposals to contribute towards greater reliability of electricity supply in the UK.
- 4.2.29 PPW paragraphs 12.8.1 – 12.8.21 describe the need for renewable and low carbon energy. Paragraph 12.8.6 states that *“The Welsh Government’s aim is to secure an appropriate mix of energy provision for Wales which maximises benefits to our economy and communities, whilst minimising potential environmental and social impacts.”*
- 4.2.30 To ensure that there is reliability of supply, it is Government policy that the electricity generation mix needs to incorporate a balance of technologies that continuously and reliably produce stable and controllable power and that within this scenario, gas-fuelled electricity generating technologies can play

a significant role. In the Annual Energy Statement (AES) (latest version published October 2014), the Department of Energy and Climate Change (DECC) supported the role of gas in the energy sector and directed the need to build new power generation infrastructure.

- 4.2.31 The AES identifies the need to retain sufficient power generation capacity following the rapid closure of existing capacity, and acknowledges the role of gas in the energy sector. The Statement also sets out the Government's long-term direction for reducing energy demand and safeguarding energy security, by increasing the proportion of energy from renewable and low carbon sources.
- 4.2.32 The Welsh Government policy statement 'A Low Carbon Revolution: Wales' Energy Policy Statement, March 2010' reflects, in terms of energy production, the work of the UK Climate Change Commission and the UK National Policy Statements on Energy and Renewables. The statement sets out a framework for carbon reduction in Wales, provides targets and advice to local planning authorities (LPAs) for implementation of policy into Local Development Plans (LDPs). In particular, it aims to maximise energy savings and energy efficiency to make producing the majority of the energy that Wales needs from low carbon sources that are feasible and less costly. The statement recognises energy needs in a modern society will remain considerable.
- 4.2.33 The 'Electricity Market Reform White Paper – Planning our electric future: a White Paper for secure, affordable and low-carbon electricity' (DECC, 2011) "*sets out the Government's commitment to transform the UK's electricity system to ensure that our future electricity supply is secure, low-carbon and affordable*". A key part of this wide-ranging reform is the introduction of a 'Capacity Mechanism' in order "*to guarantee future security of electricity supply as a quarter of ageing plant closes during this decade and the proportion of intermittent or less flexible low-carbon generation rises*" (paragraph 1.35).
- 4.2.34 The White Paper sets out, at page 24, a vision for the Electricity System following reform, in which it is stated "*The electricity grid has evolved to accommodate more localised and intermittent sources of generation, as well as being smarter and more responsive*". A significant focus of the White Paper is to decarbonise electricity generation in the long term, although it is acknowledged at paragraph 2.4.23 that "*Whilst we are going to need new, unabated gas in the next few years, we recognise that, in the longer term, it is likely that emissions from gas plant will need to reduce if we are to largely decarbonise the electricity sector and meeting our climate change targets. In doing so, there is likely to be a role for gas plant equipped with CCS [Carbon Capture and Storage], which is why new gas plants are required to be built carbon capture ready*".
- 4.2.35 'The Carbon Plan - delivering our low carbon future' (HM Government, 2011) sets out the Coalition Government's policies for how the UK will achieve decarbonisation within the framework of its energy policy, making the

transition to low carbon economy while maintaining energy security and minimising costs to customers. Paragraph 2.146 of the Carbon Plan recognises that the nature of the electricity network will need to change so that it becomes smarter at balancing demand and supply as generation/supply become more intermittent and demand increases. In light of this the Carbon Plan states that on the way to 2050, some flexible fossil fuel plant is likely to be needed to ensure security of supply.

- 4.2.36 Paragraph 2.147 of the Carbon Plan states that over the next decade, the UK will need to invest in new generation capacity to replace the coal and nuclear power stations that are set to close by the early 2020s in order to maintain our energy security, while meeting our legal commitments to reduce carbon emissions and increase renewable electricity generation. Paragraph 2.148 goes on to outline that to do this, the coming years will see a continuation of previous trends, which will include more switching from coal to gas-powered generation. Thus, the Carbon Plan reinforces the position set out in the White Paper and acknowledges that to meet our energy security needs and make the transition to a low carbon economy, gas will continue to play a valuable role.
- 4.2.37 ‘Energy Wales – a Low Carbon Transition’ (Welsh Government, March 2012) states at page 10 that *“Gas will be a key transitional fuel because greenhouse gas emissions from gas are significantly less than coal subject to the method of extraction. Gas is a flexible, responsive and reliable source of energy which can play a key role in the transition to a genuinely low carbon energy system. In the short term, gas, nuclear and bio-energy will provide the energy to compensate for the intermittency in supply from renewable resources”*.
- 4.2.38 ‘Electricity System: Assessment of Future Challenges – Annex (DECC, August 2012)’ seeks to fully understand the implications of the challenges posed by moving to an energy mix with a greater proportion of intermittent and less flexible generation and identify means of addressing them. The overall aim is to ensure that the electricity system can facilitate future low carbon generation and expected increases in electricity demand in the most secure and affordable way, with the most efficient use of assets. Again, there is acknowledgement of the continued role for unabated gas-fired generating plant. Paragraph 3.8 states that over the next two decades, gas will continue to play a key role in the UK’s energy mix alongside other lower carbon electricity sources. The paragraph goes on to state that new gas generation capacity will be needed to ensure security of supply, and to balance the electricity system as more low carbon technology becomes available.
- 4.2.39 The ‘Electricity Capacity Report’ (ECR) (National Grid, May 2017) summarises the modelling analysis undertaken regarding the amount of capacity to be secured for delivery in 2018/19 and 2021/22. The report states that there is expected to be an increase in capacity requirements for 2018/19, compared to the 2014 ECR, and for 2021/22, when compared to the 2016 ECR, based on a higher assumed peak demand.

- 4.2.40 The ‘Gas Generation Strategy’ (DECC, December 2012) consolidates the range of government policy as set out above in setting out the important role for gas generation. It is stated that as a reliable, flexible source of electricity it will play a part in any future generation mix, supporting a secure, low-carbon and affordable electricity system. It states that *“Gas currently forms an integral part of the UK’s generation mix and is a reliable, flexible source of electricity. Using gas as a fuel in our power stations currently provides a significant proportion of our electricity generation (around 40% in 2011)”*. Moreover, it suggests that there could be as much as 26 GW of new gas generation infrastructure required if the decarbonisation target is set at 200g/CO₂/kWh. It also indicates that in 2030 we could need more overall gas capacity than we have today, although operating at lower load factors, reflecting the role of ‘peaking’ plant in backing up intermittent sources of energy generation (Executive Summary). The strategy also presents scenarios at Table 2B on page 22 which indicate that up to 41 GW of new gas generation capacity will be needed by 2030 to underpin long term electricity supplies and provide back-up to nuclear and wind generation at times of peak demand.
- 4.2.41 The National Infrastructure Plan (HM Treasury, December 2014) provides explicit support for this type of project, stating: *“New gas plant is also needed and will be vital in supplying a backup for less flexible renewable generation and ensuring that the system can meet peak electricity demand”* (paragraph 8.4). Paragraph 8.3 adds that, *“Large-scale investment in gas and low-carbon electricity generation is vital in order to replace ageing energy infrastructure, maintain secure energy supplies and meet legally-binding environmental targets.”*
- 4.2.42 In October 2016, The Energy and Climate Change Committee published ‘The energy revolution and future challenges for UK energy and climate change policy — Third Report of Session 2016–17’. The report reflects on upcoming challenges for UK energy and climate policy. For energy supply it states that *“The Government should seek to build investor confidence, to avoid exacerbating difficulties in bringing forward investment in new electricity capacity and new indigenous resources. The Government should also examine the role of the ‘solidarity principle’ in managing potential gas crises, specifically how the UK can continue to participate. If excluded from the ‘solidarity principle’ the UK Government must urgently investigate alternative back-up arrangements to ensure security of supply in the event of a crisis”* (paragraph 111).
- 4.2.43 The ‘Final Report of the Industrial Strategy Commission’ (Industrial Strategy Commission, November 2017) reinforces that *“the availability of a secure and reliable energy supply is a central concern”* and emphasises that there is a *“pressing need”* to decarbonise energy supplies due to the impacts of climate change (page 58).
- 4.2.44 In April 2018, the Welsh Government published the National Development Framework (NDF) Issues, Options & Preferred Option - Consultation Paper

(April 2018). Issue B addresses ‘Climate Change, Decarbonisation and Energy’. The Paper states that “*Our aim is to see the deployment of a wide range of renewable and low carbon technologies, at all scales, whilst recognising that gas will be a key transitional fuel.*” Page 8 of Appendix A to the Issues and Options Consultation states: “*Our aim is to see the deployment of a wide range of renewable and low carbon technologies, at all scales, whilst recognising that gas will be a key transitional fuel.*” Draft NDF Objective 3 – Climate change, Decarbonisation and Energy seeks “*To enable the transition to a low carbon economy; to enable management of and adaptation to the consequences of climate change; and to support decarbonisation in Wales and help deliver the Welsh Government’s greenhouse gas emissions and renewable energy targets.*” (Draft NDF Appendix A – Issues, page 14). Publication of the final NDF is anticipated for September 2020.

4.3 Discussion

- 4.3.1 The NPSs set out a clear and urgent need for nationally significant energy generating stations and associated infrastructure, including specifically those powered by fossil fuels such as gas. This need is clearly set out in NPS EN-1 paragraphs 3.3.1 – 3.3.34 (The need for new nationally significant electricity infrastructure projects) and 3.6.1 – 3.6.7 (The role of fossil fuel electricity generation). Paragraph 1.1.1 of NPS EN-2 sets out a clear need for fossil fuel generating stations to form part of the energy mix. Paragraphs 2.1.2 of NPS EN-4 and NPS EN-5 respectively explain that the need for associated gas and electricity infrastructure is also demonstrated by NPS EN-1. Extracts of the key statements with regard to need, as made in the NPSs are provided above in section 4.2.
- 4.3.2 Since publication of the relevant NPSs, other policy and guidance published by the UK and Welsh governments provide continuing support for the urgent provision of nationally significant energy generating stations, including those powered by fossil fuels such as gas. This includes PPW paragraphs 12.8.1 – 12.8.21, which describe the need for renewable and low carbon energy development to aid the transition to a low carbon economy.
- 4.3.3 The emerging Wales NDF (Issues and Options Consultation, issued April 2018) sets out various options for energy development in Wales over the Framework period. The NDF Issues and Options Consultation sets out various options for future development in Wales, including in respect of energy infrastructure. Page 8 of Appendix A to the Issues and Options Consultation states: “*Our aim is to see the deployment of a wide range of renewable and low carbon technologies, at all scales, whilst recognising that gas will be a key transitional fuel.*”
- 4.3.4 ‘Energy Wales: A Low Carbon Transition’ and UK and European policy sets out targets on renewable energy and confirms that gas will be a key transitional fuel due to its limited greenhouse emissions compared with coal and the fact that it is a flexible, responsive and reliable source of energy.

- 4.3.5 Given the above, it can be seen that an array of government policy, both Wales and UK-wide, acknowledges the need and central concern for the electricity generation mix to incorporate a balance of technologies that reliably produce stable and controllable power during the transition to a low carbon economy.
- 4.3.6 The role of gas-fuelled electricity generating technologies is acknowledged throughout, with recognition given to the flexibility of gas generation in meeting 'peak' loads and enabling the grid to accommodate more intermittent, low carbon sources such as wind generation. This need is Wales and UK-wide due to the national electricity system and the wide dispersal of intermittent sources.
- 4.3.7 At present, peaking capacity in the UK is relatively small due to the nature of the electricity generation mix on the National Grid. Although recently there has been a significant increase in the number of proposals for flexible / peaking plant in the UK, a large proportion of these are focussed on small capacity (c. 20 MWe) liquid fuel fired plants.
- 4.3.8 Recent UK Government policy directly and indirectly acts to substantially reduce coal use in the UK. The Large Combustion Plant Directive (LCPD) as implemented in the UK sets emissions limits on existing plant and emissions levels that act to prohibit new coal plant. Nine plants that opted out of the LCPD closed by the end of 2015. Furthermore, in February 2015 the leaders of the UK's three largest political parties, issued a joint pledge on environmental issues (signed copy published at http://www.green-alliance.org.uk/resources/Leaders_Joint_Climate_Change_Agreement.pdf) which includes the statement that they will "*end the use of unabated coal for power generation*". This represents a fundamental change to UK and Wales policy on coal mining which to date has been specifically to support a diverse UK energy supply (see for example, Minerals Planning Policy Wales (2001, paragraph 61: "*UK coal contributes to energy diversity and supply*") and coal use in thermal generation, and will result in a higher reliance on gas generation.
- 4.3.9 In conclusion, there is clearly a significant requirement for further gas generation capacity to provide reliable, peaking generation as set out in the NPSs as well as other relevant UK and Welsh government guidance. The development of the Project, would allow for the rapid, reliable and viable provision of reserve capacity to the National Grid, supporting the transition to a low carbon economy by balancing some of the considerable scale of intermittent sources such as wind being developed UK-wide, and playing an important role in meeting the UK's national energy requirements.

5 Planning Policy Context

5.1 Overview

- 5.1.1 Section 104 of the PA 2008 provides that in making decisions on Applications, the SoS must have regard (amongst certain other documents and matters) to any relevant NPS and must decide applications in accordance with such relevant NPS(s) unless the adverse impacts of the proposal would outweigh its benefits (or in certain other limited circumstances).
- 5.1.2 Section 104 of the PA 2008 also requires the SoS to have regard to any Local Impact Report and other matters which the SoS *“thinks are both important and relevant to the Secretary of State’s decision”*.
- 5.1.3 This chapter sets out the relevant planning policies and guidance relevant to the Application, including reference to relevant planning guidance primarily contained within NPS EN-1 and EN-2, EN-4 and EN-5, as well as adopted and emerging PPW and relevant adopted and emerging local planning policy prepared by CCS.
- 5.1.4 An assessment of the Project, in respect of the relevant planning policies and guidance contained within this chapter of the Planning Statement, is provided in chapter 6 of the Planning Statement.

5.2 National Policy Statements

- 5.2.1 The former DECC, now the Department for BEIS, published 6 NPS for Energy in 2011. NPS EN-1 is a relevant NPS for any energy NSIP, along with the relevant technology specific NPS. For the Application this includes NPS EN-2 National Policy Statement for Fossil Fuel Electricity Generating Infrastructure.
- 5.2.2 The Application does not seek development consent for the Gas Connection or the Electrical Connection as they are considered to be Associated Development. However, the Application does seek powers of compulsory acquisition for the land and rights necessary for the Gas Connection and Electrical Connection. NPS EN-4 (National Policy Statement for Gas Supply Infrastructure) and NPS EN-5 (National Policy Statement for Electricity Networks Infrastructure) are therefore relevant to the Application in relation to assessment principles and the treatment of alternatives.

Overarching National Policy Statement for Energy (EN-1)

- 5.2.3 NPS EN-1 sets out the Government’s overall policy towards the delivery of major energy infrastructure.
- 5.2.4 Section 2 of EN-1 provides the policy context for the development of nationally significant energy infrastructure. At paragraph 2.1.2, it states that

- energy is vital to economic prosperity and social well-being and as such it is important to ensure that the UK has secure and affordable energy and the infrastructure in place to deliver this.
- 5.2.5 Section 3 of EN-1 considers the need for new nationally significant infrastructure projects, which is set out and discussed in chapter 4 of this Planning Statement.
- 5.2.6 Section 4 of NPS EN-1 sets out the general assessment principles by which applications relating to energy infrastructure are to be decided. The general assessment principles are considered in the context of the Project in chapter 6 of this Planning Statement.
- 5.2.7 Paragraph 4.1.2 of NPS EN-1 states that, given the level and urgency of need for energy infrastructure, the SoS *“should start with a presumption in favour of granting consent to applications for energy NSIPs.”*
- 5.2.8 Paragraph 4.1.3 of NPS EN-1 explains that the SoS will weigh up a proposal’s contribution to meeting the need for energy infrastructure, job creation and other long term and wider benefits, against the potential adverse impacts of the proposal in question including *“any long-term and cumulative adverse impacts, as well as any measures to avoid, reduce or compensate for any adverse impacts.”*
- 5.2.9 Paragraph 4.1.4 of NPS EN-1 continues and explains that the SoS should take into account *“environmental, social and economic benefits and adverse impacts, at national, regional and local levels”* whether identified in the NPSs or elsewhere, including in local impact reports.
- 5.2.10 Paragraph 4.1.5 states that other matters that the SoS may consider both important and relevant to its decision-making could include Development Plan Documents or other documents in the Local Development Framework and explains that, *“in the event of a conflict between these or any other documents and an NPS, the NPS prevails.”* The documents included within the Unitary Development Plan and emerging Local Development Plan for CCS are referenced in section 5.4 of this Planning Statement.
- 5.2.11 Paragraph 4.1.7 of NPS EN-1 confirms that the SoS will have regard to the guidance in Circular 11/95, as revised, on *“The Use of Conditions in Planning Permissions”* in agreeing or suggesting requirements in a DCO. Although that circular has in part been superseded by advice contained within NPPG (published in March 2014), the Applicant notes that the general advice remains essentially similar.
- 5.2.12 Paragraph 4.1.8 states that, *“The [SoS] may take into account any development consent obligations that an applicant agrees with local authorities.”*
- 5.2.13 Paragraph 4.1.9 of NPS EN-1 refers to viability, stating that: *“Where the [SoS] considers, on information provided in an application, that the financial viability*

and technical feasibility of the proposal has been properly assessed by the applicant it is unlikely to be of relevance in IPC decision making (any exceptions to this principle are dealt with where they arise in this or other energy NPSs and the reasons why financial viability or technical feasibility is likely to be of relevance explained)."

- 5.2.14 Paragraph 4.2.1 of NPS EN-1 advises that, *"All proposals for projects that are subject to the European Environmental Impact Assessment Directive must be accompanied by an Environmental Statement (ES) describing the aspects of the environment likely to be significantly affected by the project."* The ES should include an assessment of the likely significant effects of the proposed project on the environment, including direct, indirect, secondary, cumulative, short, medium and long-term, permanent and temporary, positive and negative effects at all stages of the project (paragraph 4.2.1). Paragraph 4.2.3 of NPS EN-1 adds that *"the [ES] should cover the environmental, social and economic effects arising from pre-construction, construction, operation and decommissioning of the project."* When considering cumulative effects, paragraph 4.2.5 of NPS EN-1 advises that the ES should provide information on how the effects of the proposal combine and interact with the effects of other development, including projects for which consent is sought or granted, as well as those already in existence.
- 5.2.15 In respect of Habitats and Species Regulations, paragraph 4.3.1 of NPS EN-1 advises applicants to consult with Natural Resources Wales (NRW) (as the appropriate statutory body in Wales) and to subsequently undertake an Appropriate Assessment if required.
- 5.2.16 Paragraph 4.4.1 of NPS EN-1 notes that, *"the relevance or otherwise to the decision-making process of the existence (or alleged existence) of alternatives to the proposed development is in the first instance a matter of law, detailed guidance on which falls outside the scope of this NPS. From a policy perspective this NPS does not contain any general requirement to consider alternatives or to establish whether the proposed project represents the best option."* However, paragraph 4.4.2 of NPS EN-1 states that applicants are obliged to include, as a matter of fact, information about the main alternatives that have been considered within the ES, including the main reasons for the applicant's choice, taking into account the environmental, social and economic effects.
- 5.2.17 Paragraph 4.5.1 of NPS EN-1 states that good design for energy infrastructure *"should produce sustainable infrastructure sensitive to place, efficient in the use of natural resources and energy used in their construction and operation, matched by an appearance that demonstrates good aesthetic as far as possible."* However, paragraph 4.5.1 also acknowledges that *"...the nature of much energy infrastructure development will often limit the extent to which it can contribute to the enhancement of the quality of the area."*
- 5.2.18 Paragraph 4.5.3 of NPS EN-1 seeks that proposals are *"sustainable and, having regard to regulatory and other constraints, are as attractive, durable*

and adaptable (including taking account of natural hazards such as flooding) as they can be". Further, Paragraph 4.5.3 states that "Whilst the applicant may not have any or very limited choice in the physical appearance of some energy infrastructure, there may be opportunities for the applicant to demonstrate good design in terms of siting relative to existing landscape character, landform and vegetation."

- 5.2.19 Paragraph 4.5.4 of NPS EN-1 seeks that applicants "*demonstrate in their application documents how the design process was conducted and how the proposed design evolved. Where a number of different designs were considered, applicants should set out the reasons why the favoured choice has been selected*". Further, paragraph 4.5.4 of NPS EN-1 notes that "*in considering applications the [SoS] should take into account the ultimate purpose of the infrastructure and bear in mind the operational, safety and security requirements which the design has to satisfy.*"
- 5.2.20 Paragraph 4.5.5 of NPS EN-1 states that "*applicants are encouraged*" to use design review services.
- 5.2.21 Paragraph 4.6.6 of NPS EN-1 states that, "*Under guidelines issued by DECC (then DTI) in 2006, any application to develop a thermal generating station under Section 36 of the Electricity Act 1989 must either include CHP or contain evidence that the possibilities for CHP have been fully explored to inform the IPC's consideration of the application.*" Further, paragraph 4.6.7 of NPS EN-1 advises that the opportunities for CHP should be considered from the outset of the site selection process.
- 5.2.22 Section 4.8 of EN-1 sets out considerations that applicants and the ExA/SoS should take into account to help ensure that new energy infrastructure is resilient to climate change. Paragraph 4.8.5 of NPS EN-1 advises that applicants "*must consider the impacts of climate change when planning the location, design, build, operation and, where appropriate, decommissioning of new energy infrastructure.*" Paragraphs 4.8.7 and 4.8.9 of NPS EN-1 state that energy infrastructure should apply the high emissions scenario when taking into account the potential impacts of climate change.
- 5.2.23 Paragraph 4.9.1 of NPS EN-1 advises applicants to consult the National Grid and to ensure that there is the necessary infrastructure and capacity within an existing or planned transmission or distribution network to accommodate the electricity generated.
- 5.2.24 Paragraph 4.10.1 of NPS EN-1 advises that "*Issues relating to discharges or emissions from a proposed project which affect air quality, water quality, land quality and the marine environment, or which include noise and vibration may be subject to separate regulation under the pollution control framework or other consenting and licensing regimes.*"
- 5.2.25 Paragraph 4.11.1 of NPS EN-1 advises applicants to consult with the HSE on matters relating to safety which are relevant to the construction, operation and decommissioning of energy infrastructure.

- 5.2.26 Paragraph 4.12.1 of NPS EN-1 explains that all establishments wishing to hold stock of hazardous substances above a threshold will require Hazardous Substances consent, and thus should consult the HSE at the pre-application stage.
- 5.2.27 Section 4.13 of NPS EN-1 advises that energy production has the potential to impact on health and wellbeing (paragraph 4.13.1), through increased traffic, air or water pollution, dust, odour, hazardous waste and substances, noise, exposure to radiation and increases in pests (paragraph 4.13.3). Accordingly, the ES should assess these effects and identify any measures to avoid, reduce or compensate for these impacts as appropriate (paragraph 4.13.2).
- 5.2.28 Paragraph 4.14.2 of NPS EN-1 stresses the importance of considering possible sources of nuisance and how they may be mitigated or limited at the pre-application stage under section 79(1) of the Environmental Protection Act 1990.
- 5.2.29 Paragraph 4.15.2 of NPS EN-1 outlines that *“Government policy is to ensure that, where possible, proportionate protective security measures are designed into new infrastructure projects at an early stage in the project development.”*
- 5.2.30 Part 5 of NPS EN-1 explains the potential impacts of energy infrastructure, in terms of: air quality and emissions; biodiversity and ecological conservation; civil and military aviation and defence interests; coastal change; dust, odour, artificial light, smoke, steam and insect infestation; flood risk; historic environment; landscape and visual; land use including open space, green infrastructure and Green Belt; noise and vibration; socio-economic; traffic and transport; waste management; and water quality and resources.
- 5.2.31 Paragraph 5.2.1 of NPS EN-1 advises that the construction, operation and decommissioning of infrastructure development *“can involve emissions to air which could lead to adverse impacts on health, on protected species and habitats, or on the wider countryside.”* Paragraph 5.2.7 of NPS EN-1 provides that the applicant should undertake an assessment as part of the ES, describing:
- *“any significant air emissions, their mitigation and any residual effects distinguishing between the project stages and taking account of any significant emissions from any road traffic generated by the project;*
 - *the predicted absolute emission levels of the proposed project, after mitigation methods have been applied;*
 - *existing air quality levels and the relative change in air quality from existing levels; and*
 - *any potential eutrophication impacts.”*

- 5.2.32 With regard to biodiversity and geological conservation for EIA development, paragraph 5.3.3 of NPS EN-1 advises that the ES *“clearly sets out any effects on internationally, nationally and locally designated sites of ecological or geological conservation importance, on protected species and on habitats and other species identified as being of principal importance for the conservation of biodiversity.”* Appropriate mitigation measures should be an integral part of the proposed development and should demonstrate that: activities are confined to the minimum areas required during construction; best practice is followed during construction and operation; habitats are restored after construction works where practicable; and opportunities are taken to enhance or create new habitats (paragraph 5.3.18).
- 5.2.33 Paragraph 5.4.1 of NPS EN-1 advises that civil and military aviation and defence interests can be affected by new energy development, and as such an assessment of potential effects should be set out within the ES (paragraph 5.4.10). In addition, the MoD, CAA, NATS and any aerodrome likely to be affected by the proposed development should be consulted (paragraph 5.4.11).
- 5.2.34 Paragraph 5.6.1 of NPS EN-1 states that, *“during the construction, operation and decommissioning of energy infrastructure there is potential for the release of a range of emissions such as odour, dust, steam, smoke, artificial light and infestation of insects.”* Accordingly, applicants are required to assess the potential for emissions and the impact on amenity in the ES, in particular: the type, quantity and timing of emissions; aspects giving rise to emissions; locations affected by the emissions; effects of the emissions on identified locations; and measures to be employed in preventing or mitigating emissions (paragraph 5.6.5). Paragraph 5.6.11 advises that mitigation measures may be provided in respect of engineering, lay-out or administration.
- 5.2.35 Paragraph 5.7.4 of NPS EN-1 states that application for energy projects of 1ha or greater in Flood Zone 1 and all energy projects in Flood Zones 2 and 3 should be accompanied by a flood risk assessment (FRA). Where necessary, paragraph 5.7.18 of NPS EN-1 advises that flood risk should be mitigated by making arrangements to manage surface water and the impact of the natural water cycle on people and property.
- 5.2.36 Paragraph 5.8.1 of NPS EN-1 advises that the construction, operation and decommissioning of energy infrastructure has the potential to result in adverse impacts on the historic environment. Accordingly, the applicant is required to *“provide a description of the significance of the heritage assets affected by the proposed development and the contribution of their setting to that significance”* (paragraph 5.8.8).
- 5.2.37 Paragraph 5.9.1 of NPS EN-1 acknowledges that the landscape and visual effects of energy projects will vary according to the type of development, its location and the landscape setting. Paragraphs 5.9.5 – 5.9.7 advise that the applicant should carry out a landscape and visual impact assessment of the

effects during construction and operation, including light pollution effects on local amenity and nature conservation. Paragraph 5.9.21 notes that reducing the scale of the project can help to mitigate the landscape and visual impacts, however it is acknowledged that amending the design of proposed energy infrastructure may result in a significant operational constraint and reduction in function.

- 5.2.38 Paragraph 5.10.1 of NPS EN-1 acknowledges that an energy infrastructure project *“will have direct effects on the existing use of the proposed site and may have indirect effects on the use, or planned use, of land in the vicinity for other types of development.”* Accordingly, the applicants should consult the local community (paragraph 5.10.6) and the ES should include an assessment of the impact of the proposed development on existing and proposed land uses near the project. Paragraph 5.10.19 notes that there may be little that can be done to mitigate the direct effects of the energy project on the existing use of the proposed site; however, the effects may be minimised through the application of good design principles, including the layout of the project.
- 5.2.39 Paragraph 5.11.1 of NPS EN-1 states that excessive noise can have wide-ranging impacts on the quality of human life, health, and use and enjoyment of areas, as well as on wildlife and biodiversity (paragraph 5.11.2). Where noise impacts arise, paragraph 5.11.4 states that a noise assessment should be provided, to include: a description of the noise generating aspects of the proposal, identification of noise sensitive areas, the characteristics of the existing noise environment, and a prediction of how the noise environment will change. Mitigation measures may include engineering, layout design, or administrative measures (paragraph 5.11.12).
- 5.2.40 Paragraph 5.12.1 of NPS EN-1 states that *“[t]he construction, operation and decommissioning of energy infrastructure may have socio-economic impacts at local and regional levels.”* Accordingly, an assessment should be undertaken of all relevant socio-economic impacts, which may include: the creation of jobs and training opportunities, the provision of additional local services and improvements to local infrastructure, effects on tourism, the impact of a changing influx of workers during different phases of the project, and cumulative effects. Mitigation measures could include improvements to the visual and environmental experience for visitors and the local community through high quality design (paragraph 5.12.9).
- 5.2.41 Paragraph 5.13.1 of NPS EN-1 notes that *“The transport of materials, goods and personnel to and from a development during all project phases can have a variety of impacts on the surrounding transport infrastructure and potentially on connecting transport networks.”* The applicant should therefore undertake a transport assessment and consult with the Highways Agency and Highways Authority regarding appropriate mitigation (paragraph 5.13.3).
- 5.2.42 Paragraph 5.14.1 of NPS EN-1 outlines that government policy on hazardous and non-hazardous waste is intended to *“protect human health and the*

environment by producing less waste and by using it as a resource wherever possible.” Paragraph 5.14.6 states that the applicant should set out the arrangements proposed for managing waste and include information on the proposed waste recovery and disposal system.

- 5.2.43 Paragraph 5.15.1 of NPS EN-1 advises that infrastructure development can have adverse effects during the construction, operation and decommissioning phases on the water environment, including groundwater, inland surface water, transitional waters and coastal waters. Accordingly, the applicant should undertake an assessment of *“the existing status of, and impacts of the proposed project on, water quality, water resources and physical characteristics of the water environment as part of the [ES]”* (paragraph 5.15.2). Paragraphs 5.15.9 and 5.15.10 advise that the impacts on the water environment and local water resources can be mitigated through careful design.

National Policy Statement for Fossil Fuel Electricity Generating Infrastructure (EN-2)

- 5.2.44 As referred to within chapter 4 of this Planning Statement, paragraph 1.1.1 of NPS EN-2 states *“Fossil fuel generating stations play a vital role in providing reliable electricity supplies and a secure and diverse energy mix as the UK makes the transition to a low carbon economy...”*.
- 5.2.45 Paragraph 1.2.1 of NPS EN-2 states that, NPS EN-2, together with NPS EN-1, provides the primary basis for decisions by the SoS on applications for nationally significant fossil fuel electricity generating stations.
- 5.2.46 Part 2 of NPS EN-2 provides additional guidance to Part 4 and Part 5 of EN-1 regarding the assessment of impacts specifically associated with fossil fuel generating stations.
- 5.2.47 Paragraph 2.2.1 of NPS EN-2 states *“it is for energy companies to decide which applications to bring forward and the government does not seek to direct applicants to particular sites for fossil fuel generating stations.”*
- 5.2.48 NPS EN-2 notes that *“Fossil fuel generating stations have large land footprints and will therefore only be possible where the applicant is able to acquire a suitably-sized site”* (paragraph 2.2.2). It also notes that *“Applicants should locate new fossil fuel generating stations in the vicinity of existing transport routes wherever possible”* (paragraph 2.2.6).
- 5.2.49 Section 2.3 of NPS EN-2 states that government policy criteria for fossil fuel generation stations relating to – CHP, Carbon Capture and Storage, climate change adaptation, and *“good design”* – must be met before consent is given.
- 5.2.50 Section 2.3.13 of NPS EN-2 sets out considerations specifically for fossil fuel generating stations in respect of climate change.

- 5.2.51 Paragraph 2.3.16 of NPS EN-2 states that, “*Applicants should demonstrate good design particularly in respect of landscape and visual amenity ...and in the design of the project to mitigate impacts such as noise and vibration, transport impacts and air emissions.*”
- 5.2.52 Section 2.4 of NPS EN-2 contains additional policy for assessing the potential impacts of energy infrastructure projects for fossil fuel generating stations, relating to: air emissions; landscape and visual; release of dust by coal-fired generating stations; residue management for coal-fired generating stations; and water quality and resources.
- 5.2.53 Paragraph 2.5.2 of NPS EN-2 acknowledges that CO₂ emissions are a significant adverse impact of fossil fuel generating stations. As such, paragraph 2.5.5 of EN-2 states that an assessment should be carried out at the initial stages of developing proposals, and paragraph 2.5.8 of EN-2 states that the SoS and NRW should be satisfied that the potential adverse impacts of mitigation measures are assessed.
- 5.2.54 Paragraph 2.6.2 of NPS EN-2 advises that the main structures of a fossil fuel generating station – including the turbine and boiler halls, exhaust gas stacks, storage facilities, cooling towers, and water processing plant – are large and likely to have an impact on the surrounding landscape and visual amenity. A landscape and visual impact assessment should therefore be included as part of the ES, and consideration should be given to the design of the plant, the materials to be used, and the visual impact of the stack (paragraphs 2.6.3 and 2.6.4). Paragraph 2.6.5 of EN-2 states that mitigation is to minimise impact on visual amenity as far as reasonably practicable; however, the visibility of a fossil fuel generating station should be given limited weight if the SoS is satisfied that the location is appropriate for the project and that it has been designed sensitively (paragraph 2.6.10).
- 5.2.55 Paragraph 2.7.1 of NPS EN-2 advises that the sources of noise and vibration from fossil fuel generating stations may include the gas and steam turbines and external noise sources such as externally-sited air-cooled condensers. Paragraph 2.7.2 of EN-2 states that the ES should include a noise assessment, and paragraph 2.7.5 of NPS EN-2 states that mitigation should be achieved through “*good design*”, including enclosure of plant and machinery in noise-reducing buildings where possible.
- 5.2.56 Paragraph 2.10.1 of NPS EN-2 advises that water cooling systems for fossil fuel generating stations may have additional impacts on water quality, abstraction and discharge. Where the project is likely to have an effect on water quality and resources, Paragraph 2.10.2 of EN-2 states that an assessment should be undertaken to “*demonstrate that appropriate measures will be put in place to avoid or minimise adverse impacts of abstraction and discharge of cooling water.*”

National Policy Statement for Gas Supply Infrastructure and Gas and Oil Pipelines (EN-4)

- 5.2.57 NPS EN-4, together with NPS EN-1, provides the primary basis for decisions by the SoS on applications for gas supply infrastructure and gas and oil pipelines (paragraph 1.2.1). As noted above, the Application does not seek development consent for the Gas Connection. APL is seeking powers of compulsory acquisition for the land rights required for the Gas Connection as part of the application.
- 5.2.58 Part 2 of NPS EN-4 provides additional guidance to Part 4 and Part 5 of EN-1 regarding the assessment of impacts specific to gas supply infrastructure and oil and gas pipelines.
- 5.2.59 Sections 2.20 – 2.23 of NPS EN-4 set out addition policy for assessing the potential impacts of gas and oil pipelines, relating to: noise and vibration; biodiversity, landscape and visual; water quality and resources; and soil and geology.
- 5.2.60 Paragraph 2.20.2 of NPS EN-4 states that there are specific noise and vibration impacts which apply to gas pipelines, including – *“During the pre-construction phase there could be vibration effects from seismic surveys. During construction, tasks may include site clearance, soil movement, ground excavation, tunnelling, trenching, pipe laying and welding, and ground reinstatement. In addition, increased HGV traffic will be generated on local roads for the movement of materials.”* The ES should include an assessment of all of the above noise and vibration effects during the pre-construction and construction phases (paragraph 2.20.5).
- 5.2.61 Paragraph 2.21.1 of NPS EN-4 states that the construction of a pipeline can impact upon *“specific landscape elements within and adjacent to the pipeline route, such as grasslands, field boundaries (hedgerows, hedgebanks, drystone walls, fences), trees, woodlands, and watercourses.”* Accordingly, the ES *“should include an assessment of the biodiversity and landscape and visual effects of the proposed route and of the main alternative routes considered”* (paragraph 2.21.3 of EN4). Where it is not possible to restore the landscape to its original state, Paragraph 2.21.3 of EN-4 also states that *“the applicant should set out measures to avoid, mitigate, or employ other landscape measures to compensate for, any adverse effect on the landscape.”*
- 5.2.62 Paragraph 2.22.2 of NPS EN-4 advises that *“constructing pipelines creates corridors of surface clearance and excavation that can potentially affect watercourses, aquifers, water abstraction and discharge points, areas prone to flooding and ecological receptors.”* As such, an assessment should be provided in the ES where the project is likely to have effects on water resources or water quality, for example through impacts on: *‘groundwater recharge or on existing surface water or ground abstraction points; associated ecological receptors’*, or through: *“siltation or spillages,*

discharges from maintenance activities or the discharge of disposals such as wastewater or solvents” (paragraphs 2.22.3 and 2.22.4).

- 5.2.63 Paragraph 2.23.1 of NPS EN-4 states that *“it will be important for applicants to understand the soil types and the nature of the underlying strata.”* Accordingly, applicants should consult with the relevant statutory consultees at an early stage regarding the potential impact of gas pipelines on soil and geology (paragraph 2.23.4). Paragraph 2.23.2 states that applicants should assess the stability of the ground conditions associated with the pipeline route, including considering the options for installing the pipeline.

National Policy Statement for Electricity Networks Infrastructure (EN-5)

- 5.2.64 NPS EN-5, together with NPS EN-1, provides the primary basis for decisions by the SoS on applications for electricity networks infrastructure NSIPs (Paragraph 1.2.1) and associated development of electrical networks infrastructure for other NSIPs. As explained above, the Application does not seek development consent for the Electrical Connection. However, APL is seeking powers of compulsory acquisition over the land required for the electrical connection in the Application.
- 5.2.65 Part 2 of NPS EN-5 provides additional guidance to Part 4 and Part 5 of EN-1 regarding the assessment of impacts specific to electricity networks infrastructure.
- 5.2.66 In respect of climate change adaptation, paragraph 2.4.1 of NPS EN-5 states that applicants should set out the extent to which the proposed development would be vulnerable and how it would be resilient to: flooding; the effects of wind and storms; higher average temperatures; and earth movement or subsidence.
- 5.2.67 Paragraph 2.5.2 of NPS EN-5 states that, *“proposals for electricity networks infrastructure should demonstrate good design in their approach to mitigating the potential adverse impacts which can be associated with overhead lines”*, particularly in respect of: biodiversity and geological conservation; landscape and visual; noise and vibration; and EMFs.
- 5.2.68 Paragraph 2.7.1 of NPS EN-5 advises that there is the potential for large birds to collide with overhead power lines, particularly in poor visibility and advises on how to mitigate such impacts.
- 5.2.69 Paragraphs 2.8.4 – 2.8.6 of NPS EN-5 state that applicants should follow guidance set out in the Holford Rules when considering the approach to the routing of new overhead lines. Paragraph 2.8.4 also states that applicants should offer *“constructive proposals for additional mitigation of the proposed overhead lines”*, and consider the *“potential costs and benefits of other feasible means of connection or reinforcement”* where the proposed overhead line is likely to have a significant visual impact.

- 5.2.70 Paragraph 2.8.8 of NPS EN-5 acknowledges that, whilst the development of overhead lines will often be appropriate for meeting the need for new electricity lines of 132kV and above, there are cases where overhead lines are not appropriate.
- 5.2.71 Paragraph 2.8.9 of NPS EN-5 notes, *“The impacts and costs of both overhead and underground options vary considerably between individual projects (both in absolute and relative terms). Therefore, each project should be assessed individually on the basis of its specific circumstances and taking account of the fact that Government has not laid down any general rule about when an overhead line should be considered unacceptable.”*
- 5.2.72 Paragraph 2.10.1 of NPS EN-5 advises that, *“Power frequency Electric and Magnetic Fields (EMFs) arise from generation, transmission, distribution and use of electricity and will occur around power lines and electric cables”*. Paragraph 2.10.15 states that in order to mitigate for EMFs, the applicant should consider: height, position, insulation and protection measures; optimal phasing of high voltage overhead power lines where possible and practicable; and any new Government advice.

5.3 Welsh Planning Policy

Planning Policy Wales (Edition 9, November 2016) and associated Technical Advice Notes

- 5.3.1 PPW (Edition 9, November 2016) sets out the land use planning policies of the Welsh Government and is supplemented by 24 topic based Technical Advice Notes (TANs). TANs prescribe the Government’s policies on various planning issues that shape the preparation of development plans. The principles and objectives of TANs prescribe the overarching national guidance for specific individual environmental topics.
- 5.3.2 Both the PPW and TANs are material considerations in determining planning applications under the TCPA. These policy documents are relevant and important under the PA 2008 regime. The provisions of the PPW and TANs which are of potential relevance to the Application are set out below.

PPW Chapter 4: Planning for Sustainability & associated TANs

- 5.3.3 PPW Chapter 4, ‘Planning for Sustainability’, sets out the principles and objectives underpinning the Welsh Government’s approach to planning policy for sustainable development.
- 5.3.4 The definition of sustainable development in Wales is given in PPW Chapter 4 as: *“the process of improving the economic, social, environmental and cultural well-being of Wales by taking action, in accordance with the sustainable development principle, aimed at achieving the well-being goals.”* (PPW Figure 4.2).

5.3.5 PPW paragraph 4.2.2 highlights that the planning system provides for a presumption in favour of sustainable development to ensure that social, economic and environmental issues are balanced and integrated.

5.3.6 PPW Section 4.4 outlines the objectives for the planning system which reflect the Welsh Government's view for sustainable development and the outcomes they seek to deliver across Wales. A summary of the relevant objectives is listed below:

- *“Promote resource-efficient and climate change resilient settlement patterns...”;*
- *“Play an appropriate role in securing the provision of infrastructure to form the physical basis for sustainable communities (including... energy supplies and distribution networks...)”;*
- *“Encourage opportunities to reduce waste and all forms of pollution and promote good environmental management and best environmental practice...”;*
- *“Promote a low carbon economy and social enterprises”;*
- *“Support initiative and innovation and avoid placing unnecessary burdens on enterprises...so as to enhance the economic success of both urban and rural areas...”;*
- *“Contribute to the protection and improvement of the environment, so as to improve the quality of life, and protect local and global ecosystems”;*
- *“Minimise the risks posed by, or to, development on or adjacent to unstable or contaminated land and land liable to flooding”;*
- *“Promote quality, lasting, environmentally-sound and flexible employment opportunities”;*
- *“Contribute to the protection and, where possible, the improvement of people’s health and wellbeing as a core component of sustainable development and responding to climate change...”;*
- *“Promote access to employment, shopping, education, health, community, leisure and sports facilities and open and green space, maximising opportunities for community development and social welfare...”;*
- *“Respect and encourage diversity in the local economy...”;*
- *“Foster improvements to transport facilities and services which maintain or improve accessibility to services and facilities, secure*

employment, economic and environmental objectives, and improve safety and amenity...”;

- *“Foster social inclusion by ensuring that full advantage is taken of the opportunities to secure a more accessible environment for everyone that the development of land and buildings provides...”;* and
- *Support the need to tackle the causes of climate change by moving towards a low carbon economy...”.*

5.3.7 Chapter 4 is supplemented by TAN 6 ‘Planning for Sustainable Rural Communities’ (2010) which provides practical guidance on how the planning system can contribute to: sustainable rural economies; sustainable rural housing; sustainable rural services and sustainable agriculture. TAN 6 recognises that strong rural economies are essential to support sustainable and vibrant rural communities and supports the diversification of the rural economy by accommodating the needs of both traditional rural industries and new enterprises, whilst minimising impacts on the local community and the environment (paragraph 3.1.2).

5.3.8 TAN 12 ‘Design’ (2016) should also be considered in conjunction with Chapter 4 of PPW. This TAN sets out the objectives of good design and aims to encourage good design in all aspects of development, stating that: *“The way which development relates to its urban or rural landscape context is critical to its success”*. The aim should be to achieve good design solutions, which maximise the natural landscape assets and minimise environmental impact on the landscape. It is particularly important that proposals to amend or create new landscape are not considered as an afterthought and that the long-term impact of development on the landscape is fully understood.

5.3.9 TAN 18 ‘Transport’ (2007) provides guidance on issues relating to sustainable development through transport, so represents a further supplementary document to PPW Chapter 4. TAN 18 describes how to integrate land use and transport planning and explains how transport impacts should be assessed and mitigated.

PPW Chapter 5: Conserving and Improving Natural Heritage and the Coast & associated TANs

5.3.10 PPW Chapter 5 ‘Conserving and Improving Natural Heritage and the Coast’ sets out the Welsh Government’s overarching advice on the conservation of biodiversity and the coast in a planning context. The chapter sets out objectives for conservation that should be delivered via the planning process. It includes guidance on integrating the requirements of development and conservation, and highlights existing measures for biodiversity conservation (legislation and policy) in Wales.

5.3.11 The approach to conservation delivered through PPW is similar to the general principles contained within NPS EN-1 which states that development should aim to avoid significant harm to biodiversity and geological conservation

interests through mitigation and consideration of reasonable alternatives. Paragraph 5.3.6 of NPS EN-1 does however suggest that the benefits of nationally significant low carbon energy infrastructure development may include benefits for biodiversity and geological conservation interests and these benefits may outweigh harm to these interests.

- 5.3.12 PPW Chapter 5 is supplemented by TAN 5 'Nature conservation and Planning' (2009) which is concerned with the protection of statutorily designated site and habitats, the conservation of protected and priority species; and protecting and enhancing biodiversity and nature conservation in the wider countryside within Wales.

PPW Chapter 7: Economic Development & associated TANs

- 5.3.13 For planning purposes, Chapter 7 of the PPW defines economic development as development of land and buildings for activities that generate wealth, jobs and incomes. PPW paragraph 7.1.1 advises that economic land uses include the traditional employment uses (Class B in the Use Classes Order) as well as retail, tourism and public services. It is stated in paragraph 7.1.1 that the construction and energy sectors are important to the economy and sensitive to planning policies.
- 5.3.14 TAN 23 'Economic Development' (2014) provides additional interpretation to Chapter 7. PPW Chapter 7 states that the planning system should support economic and employment growth alongside social and environmental considerations within the context of sustainable development (paragraph 7.1.3). TAN 23 contains the concept of "*larger than local planning*", which advises that market forces do not respect local authority boundaries and therefore the planning system should ensure that it steers development to the most efficient and sustainable locations. This means that strategic planning for economic development is essential. Paragraph 2.1.1 addresses the need to weigh economic benefits and states that it should not be assumed that economic objectives are necessarily in conflict with social and environmental objectives. The TAN advises that the planning system should positively and imaginatively seek win-win outcomes.

PPW Chapter 12: Infrastructure and Services & associated TANs

- 5.3.15 Chapter 12 of PPW 'Infrastructure and Services' emphasises the importance of infrastructure projects to Wales: "*Adequate and efficient infrastructure, including services such as education and health facilities along with water supply, sewers, waste management, electricity and gas (the utilities) and telecommunications, is crucial for the economic, social and environmental sustainability of all parts of Wales*" (paragraph. 12.1.1). The Welsh Government aims to secure the environmental and telecommunications infrastructure necessary to meet sustainable development objectives, which are listed in paragraph 12.1.4 of PPW. The objectives considered to be relevant for the purposes of the Project are listed as follows:

- to promote the generation and use of energy from renewable and low carbon energy sources at all scales and promote energy efficiency, especially as a means to secure zero or low carbon developments and to tackle the causes of climate change; to promote an integrated approach to the provision and renewal of environmental and telecommunications infrastructure;
- to ensure that environmental and telecommunications infrastructure is provided in such a way as to enable sustainable development objectives to be met, avoiding adverse impacts on the environment (including the natural and historic environment), local communities and health;
- to ensure that in considering environmental and telecommunications infrastructure account is taken of the impacts of climate change in the location, design, build, operation and, where appropriate, the decommissioning of new infrastructure (see 4.5 [of PPW6]); and
- to ensure that the vulnerability of infrastructure to severe weather events is minimised and that infrastructure is designed to cope with higher average temperatures and increasing risk of storm surges, drought and flooding.

5.3.16 Paragraph 12.8.6 of PPW outlines that it is the Welsh Government's aim to, *“secure an appropriate mix of energy provision for Wales which maximises benefits to our economy and communities, whilst minimising potential environmental and social impacts. This forms part of the Welsh Government's aim to secure the strongest economic development policies to underpin growth and prosperity in Wales recognising the importance of clean energy and the efficient use of natural resources, both as an economic driver and a commitment to sustainable development secure an appropriate energy mix for Wales whilst avoiding, and where possible minimising, environmental, social and economic impacts”*.

5.3.17 For the purposes of planning policy, paragraph 12.8.7 of PPW defines *“low carbon energy”* as the term used to cover technologies that are energy efficient (but does not include nuclear). PPW figure 12.2 sets out the scales of development, for planning purposes, for low carbon and renewable energy projects. It acknowledges that an energy project is deemed to be *“strategic”* when it exceeds a threshold of 50 MW for all technologies other than onshore wind. Additionally, the PPW document recognises the role of the Secretary of State in deciding onshore projects of an installation size of over 50 MW.

PPW Chapter 13: Minimising and Managing Environmental Risks and Pollution & associated TANs

5.3.18 PPW Chapter 13 'Minimising and Managing Environmental Risks and Pollution' is concerned with maximising environmental protection for people, natural and cultural resources, property and infrastructure; and preventing or

managing pollution and promoting good environmental practice (paragraph 13.1.2).

- 5.3.19 Chapter 13 is supplemented by TAN 15 'Development and Flood Risk' (2004), which provides a precautionary framework to guide planning decisions within which risks arising from both river and coastal flooding, and from additional run-off from development in any location, can be assessed.
- 5.3.20 PPW Chapter 13 is also supplemented by TAN 11 'Noise' (1997), which provides advice on how the planning system can be used to minimise the adverse impact of noise without placing unreasonable restrictions on development or adding unduly to the costs and administrative burdens of business. It outlines some of the main considerations which LPAs should take into account in determining planning applications for development which will either generate noise or be exposed to existing noise sources.

PPW Chapter 14: Minerals & associated Minerals TANs (MTANs)

- 5.3.21 PPW Chapter 14 sets out land use planning policy guidance in relation to mineral extraction and related development in Wales, which includes all minerals and substances in, on or under land extracted either by underground or surface working. The key principles are:
- *"To provide for an adequate supply of minerals that society needs now and in the future, together with protecting and improving amenity";*
 - *"To protect things that are highly cherished for their intrinsic qualities, such as wildlife, landscapes and historic features; and to protect human health and safety by ensuring that environmental impacts caused by mineral extraction and transportation are within acceptable limits; and to secure, without compromise, restoration and aftercare to provide for appropriate and beneficial after-use";*
 - *"To help conserve non-renewable resources for future generations through efficient use, recycling and waste prevention; to protect renewable resources from serious harm or pollution; and to promote the use of appropriate alternative materials";* and
 - *"To ensure an adequate supply of minerals that are needed at prices that are reasonable; and to safeguard mineral resources for future generations."*
- 5.3.22 Two MTANs have been produced, one concerning aggregates (MTAN 1, March 2004) and the other concerning coal (MTAN 2, 2009).
- 5.3.23 They set out detailed advice on the mechanisms for delivering the policy for coal extraction, through surface and underground working, by mineral planning authorities and the coal mining industry and may be material in the determination of applications under the TCPA 1990.

- 5.3.24 Accordingly they may, potentially, be considered relevant in relation to NSIP applications under the PA 2008, in interpreting land use criteria contained in the relevant NPS.
- 5.3.25 The Project Site is located on land identified within local planning policy with coal and sand and aggregate resources (section 2.10) and therefore the two MTANs may, potentially be considered relevant in relation to NSIP applications under the PA 2008, in interpreting land use criteria contained in the relevant NPS.

Other TANs

- 5.3.26 TAN 20, 'Planning and the Welsh Language' (2017), provides guidance on how the Welsh language may be given appropriate consideration in the planning system, particularly in respect of LDPs, development management and signs and advertisements. Paragraph 3.1.1 notes that, "*Planning decisions should be concerned with the use of land rather than the identity or personal characteristics of the user.*"
- 5.3.27 TAN 21, 'Waste' (2014), advises on the role of land use planning in the management and control of waste. Guidance is based on the principles of the waste hierarchy, which seeks to prevent waste in the first instance, or alternatively re-use or recycle waste.

Draft Planning Policy Wales (Edition 10, February 2018) and associated Technical Advice Notes

- 5.3.28 The Welsh Government consulted on a draft Edition 10 of PPW between February and May 2018; however, this edition is at a relatively early stage of preparation and Edition 9 remains the latest adopted guidance.
- 5.3.29 Within Edition 10, PPW has been restructured into policy themes in light of the Well-being of Future Generations (Wales) Act 2015 and policy updated to reflect new Welsh Government strategies and policies.
- 5.3.30 As with previous editions, PPW Edition 10 will be supplemented by a series of TANs and policy clarification letters.
- 5.3.31 Draft PPW Paragraphs 1.22 – 1.24 recognise the role of the planning system for transitioning to a low carbon economy and building resilience to climate impacts. Paragraph 1.22 acknowledges that "*The planning system in Wales plays a key role in delivering clean growth and decarbonisation and is also crucial in building resilience to the impacts of climate change. The transition to a low carbon economy not only brings opportunities for clean growth and quality jobs but also has wider benefits of enhanced places to live and work, with clean air and water and improved health outcomes.*"
- 5.3.32 Draft PPW Paragraphs 4.99 – 4.163 summarise the Welsh Government's priorities for Energy. Draft PPW paragraph 4.99 states that "*The Welsh Government is committed to delivering the outcomes set out in our Energy*

Policy Statement Energy Wales: A Low Carbon Transition (2012). Our priorities are:

- *Reducing the amount of energy we use in Wales;*
- *Reducing our reliance on energy generated from fossil fuels; and*
- *Actively managing the transition to a low carbon economy.”*

5.3.33 Draft PPW paragraph 4.101 states that *“Planning applications for onshore generating projects in Wales which have an installed generation capacity of between 10MW and 50MW (there is no upper limit for onshore wind generating stations) are made directly to the Welsh Ministers under the Developments of National Significance (DNS) process. Provisions in the Wales Act 2017 devolve all energy generating projects up to 350MW, however, these provisions are yet to be commenced.”*

5.3.34 Draft PPW paragraph 4.102 recognises the benefits of securing energy from a mix of energy sources, stating that *“The planning system should secure an appropriate mix of energy provision, which maximises benefits to our economy and communities whilst minimising potential environmental and social impacts.”*

5.3.35 Draft PPW paragraphs 4.123 – 4.127 summarise the Welsh Government’s direction for renewable and low carbon energy. Paragraph 4.123 states that *“Planning authorities should facilitate all forms of renewable and low carbon energy development, using up to date and appropriate evidence. Planning authorities should seek to ensure their area’s full potential for renewable and low carbon energy generation is achieved and renewable energy targets are met.”*

5.3.36 Draft PPW paragraph 4.127 continues that *“Planning applications for renewable and low carbon energy generation development, which are in accordance with development plan policies, should be supported.”*

5.3.37 Draft PPW paragraphs 4.1.42 – 4.1.44 sets out the Welsh Government’s approach to development management and renewable and low carbon energy. Paragraph 4.142 states that *“In determining applications for the range of renewable and low carbon energy technologies, planning authorities should give significant weight to the Welsh Government’s targets to increase renewable and low carbon energy generation, as part of our overall approach to tackling climate change and increasing energy security”.*

Wales Spatial Plan (2004, updated 2008)

5.3.38 The Wales Spatial Plan was adopted by the Welsh Government in 2004 and updated in 2008.

5.3.39 The purpose of the Wales Spatial Plan is *“to ensure that what is done in the public, private and third sectors in Wales is integrated and sustainable, and*

that actions within an area support each other and jointly move towards a shared vision for Wales and for the different parts of Wales” (paragraph 1.5). The Plan identifies six sub-regions in Wales but does not define these Spatial Plan Areas by administrative boundaries, allowing partners to work together on common issues in a flexible way. The Spatial Plan area which the Project Site falls under is “Swansea Bay – Waterfront and Western Valleys”.

- 5.3.40 Chapter 11 recognises that the economy in Wales has a spatial dimension. Paragraph 11.1 recognises that while some areas adjoining the English border have economic performance characteristics fairly similar to the UK average, the more western areas and the former coal-mining areas lag behind.
- 5.3.41 Paragraph 11.6 acknowledges the need to take a joint approach with local authorities, travel consortia, and others to tackling regional infrastructure problems on issues of housing, transport, water, sewerage, energy, waste and ICT.
- 5.3.42 Chapter 20 relates specifically to the area of “Swansea Bay – Waterfront and Western Valleys” where the Project Site is located. Paragraph 20.1 sets out a number of key priorities for the region, including: *“improving accessibility”, “developing a cutting edge knowledge economy”, “reducing economic inactivity” and “ensuring that environmental protection and enhancement are fully integrated”.*

Wales National Development Framework (emerging)

- 5.3.43 The NDF is currently being prepared by the Planning Directorate and will set out a twenty-year land use framework for Wales and will replace the current Wales Spatial Plan. The NDF will set out where nationally important growth and infrastructure is needed and how the planning system can deliver it.
- 5.3.44 In April 2018, the Welsh Government published the NDF Issues, Options & Preferred Option - Consultation Paper (April 2018). Issue B addresses ‘Climate Change, Decarbonisation and Energy’. The Paper states that *“Our aim is to see the deployment of a wide range of renewable and low carbon technologies, at all scales, whilst recognising that gas will be a key transitional fuel.”* Page 8 of Appendix A to the Issues and Options Consultation states: *“Our aim is to see the deployment of a wide range of renewable and low carbon technologies, at all scales, whilst recognising that gas will be a key transitional fuel.”*
- 5.3.45 Draft NDF Objective 3 – Climate change, Decarbonisation and Energy seeks *“To enable the transition to a low carbon economy; to enable management of and adaption to the consequences of climate change; and to support decarbonisation in Wales and help deliver the Welsh Government’s greenhouse gas emissions and renewable energy targets.”* (Draft NDF Appendix A – Issues, page 14).
- 5.3.46 Publication of the final NDF is anticipated for September 2020.

Environment Strategy for Wales (2006)

- 5.3.47 The Environment Strategy for Wales was published in 2006 and outlines the Welsh Government's long term strategy for the environment of Wales over the next 20 years. The purpose of the Strategy is to provide a framework within which to achieve an environment that is clean, healthy, biologically diverse and valued by the people of Wales, such that by 2026, the Welsh environment is thriving and contributing to the economic and social well-being and health of all of the people of Wales.
- 5.3.48 The Environment Strategy has 5 main environmental issues: addressing climate change; sustainable resource use; distinctive biodiversity, landscapes and seascapes; the local environment; and environmental hazards. For each of the environmental themes, the Strategy explains the issues, proposed outcomes and associated indicators and timelines for delivery.
- 5.3.49 The Environment Strategy is currently being reviewed by the Welsh Government to ensure that it reflects the relevant commitments in the Natural Resource Management Programme.

5.4 Local Planning Policy

City and County of Swansea Unitary Development Plan (Adopted November 2008)

- 5.4.1 The CCS Unitary Development Plan Document (UDP) was adopted in November 2008 and comprises the UDP Written Statement and UDP Proposals Map. The UDP is the most up to date Development Plan for the area and is used in the determination of planning applications. The UDP sets out a range of policies and proposals relating to future development within CCS up to 2016.

UDP Proposals Map & Key Site-Specific Policies

- 5.4.2 As shown on the UDP Proposals Map (Figure 5-1 and 5-2), the Project Site is located on land identified as "Coal" and "Sand and Aggregates", where UDP Policies R2 and R4 respectively apply.
- 5.4.3 Policy R2 states that development proposals that would affect the working of known potential resources will have to be accompanied by a full assessment of the potential resource and the impact of the proposal in terms of sterilising the resource. Similarly, Policy R4 states that development proposals that would affect the working of known potential mineral resources will have to be accompanied by a full assessment of the potential mineral resource and the impact of the proposal in terms of sterilising the resource.
- 5.4.4 The Project Site is also located adjacent to the south of a Hazardous Installation Consultation Zone and approximately 200 m to the north of a Notified High Pressure Mains Buffer, where UDP Policy EV41 applies. Policy

EV41 states that development of land in the vicinity of existing hazardous installations will not be permitted if there would be a significant risk to life or health.

5.4.5 Approximately 300 m to the east of the Project Site, and therefore not affected by the Project, is land identified as having known potential for “Crushed Rock” mineral resources, where UDP Policy R5 applies. Policy R5 states that development proposals that would affect the working of known potential mineral resources will have to be accompanied by a full assessment of the potential mineral resource and the impact of the proposal in terms of sterilising the resource.

Figure 5-1: Extract from UDP Proposals Map (Map 2: Urban Area East)

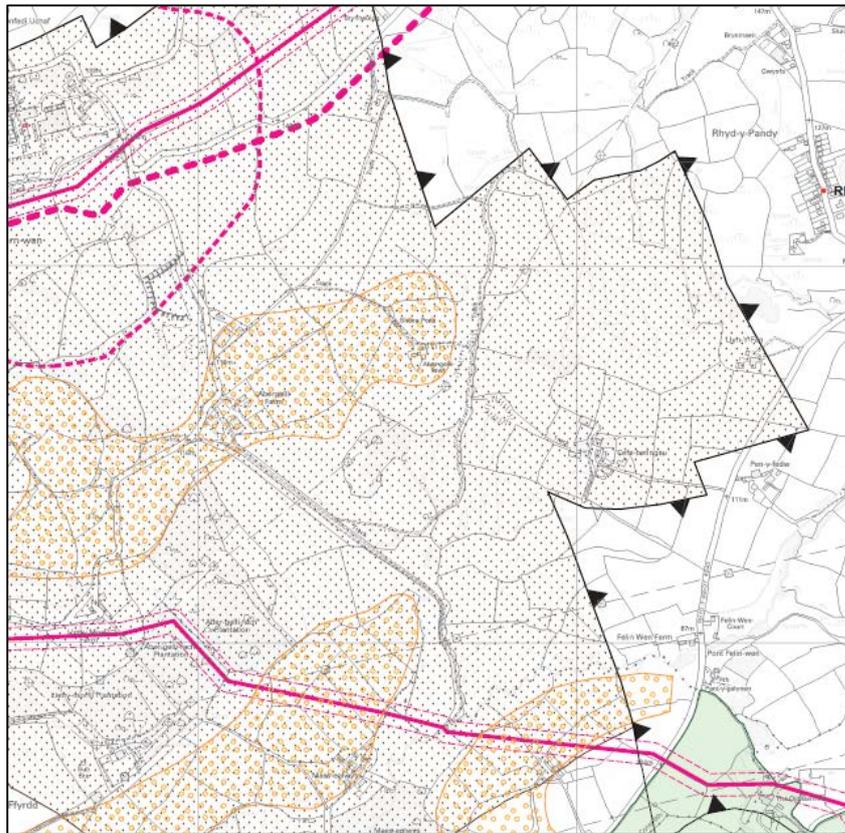


Figure 5-2: Extract from UDP Proposals Map (Key)

 AS4 - Public Access Route/Cycle Path	 EC1 - Employment Site
 AS7 - Bus Services/Priority Bus Route	 EC2 - SA1 Swansea Waterfront
 AS8 - Park and Ride	 Mixed Use
 AS11 - Road Development	 EC5 - District Shopping Centre
 AS12 - Docks	 EC7 - Enterprise Park Retailing
 EV9 - Conservation Area	 EC16 - Swansea Bay Recreational & Tourism Facilities
 EV11 - Historic Park & Garden	 HC1 - Housing Site
 EV16 - Small Village	 HC1 - Completed Housing Site
 EV20/21 - Development in the Countryside	 HC9 - Gypsy Site
 EV23 - Green Wedge	 HC13 - Murrison Hospital
 EV24 - Greenspace Protection	 HC16 - Cemetery
 EV25 - SAC, SPA, RAMSAR	 HC19 - Tawe Riverside Walk
 EV27 - SSSI, NNR	 HC20 - Swansea Urban Woodland
 EV29 - Common Land	 HC23 - Community Recreation Land
 EV32 - Environmental Enhancement	 HC28 - Sports Facility
 EV39 - Land Instability	 HC31 - Water Based Recreation
 EV40 - Hafod Air Quality Management Area	 HC32 - Royal Fern Golf Resort Project
 EV41 - Transco Gas Pipeline Milford Haven to Cilfrew	 R2 - Coal
 EV41 - Notified High Pressure Main	 R4 - Sand & Aggregates
 EV41 - Hazardous Installation Site	 R5 - Crushed Rock
 EV41 - Hazardous Installation Consultation Zone	

Development Proposals in the Surrounding Area

- 5.4.6 Policy EC1 allocates 190 ha of employment land at Felindre Strategic Business Park, located approximately 1.5 km to the south-west of the Project Site, in order to meet the growth needs of the local economy.
- 5.4.7 Policy HC1 allocates land at Tircoed, Penllergaer, located approximately 2.5 km to the south-west of the Project Site, for the delivery of 84 units.

Other Relevant UDP Policies

- 5.4.8 The UDP Written Statement sets out the broad vision and strategy for development and conservation together with more detailed policies and development proposals. In addition to the site-specific policies set out above, the following UDP policies are also considered to be relevant.
- 5.4.9 The vision for the UDP is for “*A sustainable approach to the development of a prosperous region focused on a cosmopolitan and multi-cultural City and County, which capitalises on its waterfront location. The strategy will be based on the conservation of the best we have, whilst making effective provision for the promotion of employment, good housing, shopping, leisure, tourism, community and education facilities in a safe, accessible, innovatively designed, healthy, ecologically rich and visually attractive environment.*”
- 5.4.10 Strategic Policy SP1 states that “*sustainable development will be pursued as an integral principle of the planning and development process*”.

- 5.4.11 Strategic Policy SP2 states that *“the countryside will be protected and conserved...”*.
- 5.4.12 Strategic Policy SP2 also states that the natural, built, and cultural heritage of the County will be protected and enhanced to safeguard from materially harmful development.
- 5.4.13 Policy SP10 states that *“Mineral resources will be conserved as far as possible. Mineral development will be limited to that which is essential for economic growth, with associated environmental disturbance kept to a minimum. Restoration and aftercare will be required to be of a high quality. Within areas of significant environmental sensitivity, mineral development will be resisted.”*
- 5.4.14 Strategic Policy SP11 states that: *“the upgrading of infrastructure provision and the generation of energy from renewable resources to meet the needs of existing and new development will be favoured, provided that environmental impact is kept to a minimum”*.
- 5.4.15 Strategic Policy SP12 states that the Council will encourage development that makes *“efficient use of resources and energy”*.
- 5.4.16 Policy EV1 states that new development should accord with a number of objectives of *“good design”*, including:
- i. *“Be appropriate to its local context in terms of scale, height, massing, elevational treatment, materials and detailing, layout, form, mix and density”*;
 - ii. *“Integrate effectively with adjacent spaces and the public realm”*;
 - iii. *“Not result in a significant detrimental impact on local amenity in terms of visual impact, loss of light or privacy, disturbance and traffic movements”*;
 - iv. *“Incorporate a good standard of landscape design”*; and
 - v. *“Sensitively relate to existing development patterns and seek to protect natural heritage, the historic and cultural environment not only on-site, but in terms of potential impact on neighbouring areas of importance”*.
- 5.4.17 Policy EV2 states that new development should have regard to the physical character and topography of the site and its surroundings by, inter alia:
- i. *“Avoiding locations that would have a significant adverse impact on prominent buildings, landscapes, open spaces and the general including loss of visual amenity,*

- ii. Effectively integrating with the landscape, seascape or coastline by utilising topography to integrate into the contours of the site and avoiding conspicuous locations on prominent skylines and ridges,*
 - iii. Retaining important views into and out of the site,*
 - iv. Taking into account and where possible retaining site features including existing buildings, topography, landscape, archaeological and water features, trees and hedgerows, and, where appropriate:*
 - v. Undertaking, at the earliest opportunity, an assessment of species and habitats on site and, where planning permission is granted, implementing any necessary mitigation measures,*
 - vi. Avoiding detrimental effects on the historic environment,*
 - vii. Locating near transport nodes to encourage an integrated transport system,*
 - viii. Not prejudicing the viability and function of any agricultural land adjoining the site,*
 - ix. Determining whether the proposal would be at risk from flooding, increase flood risk off-site, or create additional water run-off, development for infrastructure and services,*
 - x. Having due regard to the implications of the development for infrastructure and services,*
 - xi. Integrating with existing community facilities,*
 - xii. Utilising landscape and topography to maximise energy efficiency,*
 - xiii. Having full regard to existing adjacent developments and the possible impact of environmental pollution from those developments, as well as the creation of any environmental pollution to the detriment of neighbouring occupiers (including light, air and noise),*
 - xiv. Identifying the location of any hazardous installations in the area and development that would be at risk from, or prejudice the operational use of, hazardous installations,*
 - xv. Identifying and fully addressing issues of contamination and land instability.”*
- 5.4.18 Policy EV3 states that proposals for new development will be required to, inter alia, “provide access and facilities for all” and “contribute to a high quality public realm”.
- 5.4.19 Policy EV6 states that the Council will seek to “protect, preserve and enhance” Scheduled Ancient Monuments (SAMs) and their settings, and

unscheduled archaeological site and monuments and their settings. Where proposals affect sites and areas of archaeological potential, applicants are required to undertake an assessment of the impact of development and set out measures to preserve, enhance and record features of archaeological interest. Whilst there are some SAMs located within the 5 km study area, there are none within the Project Site.

- 5.4.20 Policy EV12 states that: *“The character of lanes and public paths that contribute to the amenity, natural and historic qualities of an area will be protected... In rural areas, the design of any necessary works should be appropriate to the character of the area and should not detract from the landscape or suburbanise the area.”*
- 5.4.21 Policy EV21 states that non-residential development in the countryside will only be permitted where it can be demonstrated that:
- i. *“It is beneficial for the rural economy or rural employment, or*
 - ii. *It meets the overriding social or economic needs of the local community, or*
 - iii. *It is an appropriate development associated with farm diversification, sustainable tourism and recreation, or nature conservation and does not adversely affect the viability of an established farm unit, or*
 - iv. *It provides an acceptable economic use for previously developed land or existing building(s) in accordance with Policy EC12 [which concerns the conversion and re-use of existing rural buildings], or*
 - v. *It is essential for communications, telecommunications, other forms of utility service provision, minerals or renewable energy generation.*
- a) *Proposals for any of the above would need to demonstrate, where relevant, that: The development needs to be located in the countryside rather than in a nearby settlement,*
 - b) *The business is viable and financially sustainable, and*
 - c) *The proposal is in accord with conservation and design policies of the Plan.”*
- 5.4.22 Policy EV22 states that the countryside will be *“...conserved and enhanced for the sake of its natural heritage, natural resources, historic and cultural, environment and agricultural and recreational value through: (i) The control of development; and (ii) Practical management and improvement measures.”*
- 5.4.23 Policy EV30 states that encouragement will be given to the *“protection and improved management of woodlands, trees and hedgerows which are important for their visual amenity, historic environment, natural heritage and/or recreation value”*. Priority will be given to: *“protecting the remaining*

areas of ancient semi natural woodland and planted ancient woodland sites; promoting new planting with species appropriate to the location; and ensuring that protection of amenity interests is achieved where management involves commercial felling and replanting”.

5.4.24 Policy EV34 states that *“Development proposals that may impact upon the water environment will only be permitted where it can be demonstrated that they would not pose a significant risk to the quality and or quantity of controlled waters. Initiatives that lead to improvements in the quality of surface water will be approved subject to satisfactory ecological and visual safeguards.”*

5.4.25 Policy EV35 states that *“Development that would have an adverse impact on the water environment due to:*

- i. Additional surface water run off leading to a significant risk of flooding on site or an increase in flood risk elsewhere, and/or*
- ii. A reduction in the quality of surface water run-off,*

will only be permitted where it can be demonstrated that appropriate alleviating measures can be implemented.

Sustainable drainage systems (SUDS) will be encouraged wherever they would be effective and practicable, so as to ensure that development does not increase run off, and potentially damage important landscape features and protected species and habitats. Where SUDS are not provided then any conventional drainage system utilised must improve the status quo.”

5.4.26 Policy EV38 states that development proposals on land where there is a risk from contamination or landfill gas will not be permitted unless it can be demonstrated that *“measures can be taken to satisfactorily overcome any danger to life, health, property, controlled waters, or the natural and historic environment”.*

5.4.27 Policy EV40 states that development proposals will not be permitted that would *“cause or result in significant harm to health, local amenity, natural heritage, the historic environment or landscape character because of significant levels of air, noise or light pollution”.*

5.4.28 Policy EC13 states that development that would result in the loss of the best and most versatile agricultural land will not normally be permitted, unless *“there is an overriding need and:*

- i. Previously developed land is unavailable, and either*
- ii. Lower grade land is unavailable, or*
- iii. Lower grade land is of a higher environmental value.”*

- 5.4.29 Policy R16 states that: *“Proposals for major new developments will be required to incorporate adequate and effective waste management facilities.”*
- 5.4.30 Policy AS2 states that new developments should be designed to *“allow for the safe, efficient and non-intrusive movement of vehicles”*. In addition, the means of access to new developments should be designed to ensure that impacts on the natural, historic and built environment and local communities are minimised.
- 5.4.31 Policy AS3 states that *“development that adversely affects the safety, enjoyment and convenient use of a Public Right of Way (PROW) will only be permitted where an acceptable alternative route is identified”*.
- 5.4.32 Policy AS10 requires new developments to *“incorporate appropriate traffic management measures to mitigate against significant adverse impacts that would otherwise be caused by traffic movements”*.

City and County of Swansea Local Development Plan

- 5.4.33 CCS is currently in the process of preparing a new LDP, which upon adoption will replace the UDP as the key planning policy document for CCS up to 2025.
- 5.4.34 As of the date of publication of this document, the preparation of the LDP had been subject to the following phases of consultation and engagement:
- Stage 1: Delivery Agreement (DA) – The DA sets out the timetable for preparation of the LDP and the Council’s Community Involvement Scheme. The DA was subject to consultation in April and May 2009 and was updated in 2013;
 - Stage 2: Pre-Deposit Plan Preparation and Involvement – This stage included the preparation and collection of background evidence, and an invitation for the submission of candidate sites for assessment from 2010. A Draft LDP Vision and Objectives document and a Draft LDP Strategic Options document were subsequently subject to consultation in 2012. Following this, the Draft LDP Preferred Strategy was subject to public consultation (via exhibitions, community information sessions, presentations and workshops) in 2013, prior to the publication of the final LDP Preferred Strategy in July 2014;
 - Stage 3: Pre-Deposit Plan Preparation and Public Consultation – a Draft LDP Vision and Objectives document and a Draft LDP Strategic Options document were subsequently subject to consultation in 2012. Following this, the Draft LDP Preferred Strategy was subject to public consultation (via exhibitions, community information sessions, presentations and workshops) in 2013, prior to the publication of the final LDP Preferred Strategy in July 2014. In December 2014, a Draft LDP Proposals Map was published for consultation on proposed sites and boundary changes; and

- Stage 4: Deposit Plan (including consultation on a draft version of the LDP) – Further to preceding stages and review of consultation feedback, the Deposit LDP was published for consultation between July and August 2016.
- 5.4.35 CCS submitted the Deposit LDP to the Ministers of the Welsh Government for independent examination on the 28th July 2017. Following formal acceptance on 4th August 2017, the Ministers of the Welsh Government have appointed Inspectors to conduct the independent examination and to assess the soundness of the LDP. Examination hearings commenced on 6th February 2018 and ran until late March 2018.
- 5.4.36 The submitted LDP, comprising the Proposals Maps and Written Statement, seeks to provide a planning framework that will enable the delivery of sustainable development in the right places across the county.
- 5.4.37 Prior to the commencement of examination hearings, the submitted LDP is considered to hold some weight for decision-making purposes based on the previous stages of preparation and consultation (listed above).
- 5.4.38 The examination hearings were scheduled on a topic basis as set out in Table 5-1.

Table 5-1 CCS LDP Examination Hearings Programme

Week 1: 6 - 9 February	Week 2: 13 - 15 February	Week 3: 27 Feb - 1 March	Week 4: 13 - 15 March	Week 5: 20-22 March	Week 6: 27-29 March
Plan preparation; vision & objectives; spatial strategy	Strategic Development Areas D, E and G	Non-strategic and rural exception site allocations	Transport, social infrastructure and open space	Green Belt, Green Wedges, settlement boundaries, key villages, rural areas	Reserve
Deliverability and infrastructure	Strategic Development Areas B, C and H	Employment, retail and tourism	Welsh language; design; built & natural environment	Alternative sites	
Housing provision	Strategic Development Areas A, F, I, J, K and L		Gypsy & Traveller sites; specialist housing	Monitoring	
Affordable housing			Energy, flood risk, environmental protection, minerals & waste		

- 5.4.39 Following formal closure of the examination hearings, the Inspectors' report will be prepared and submitted to the Council with recommendations regarding the LDP. It is anticipated the LDP would be formally adopted by CCS thereafter subject to the Inspectors' recommendations.
- 5.4.40 At the closure of the examination hearings and following the publication of the Inspectors' report, the weight to be attached to the draft LDP may change based upon the Inspectors' recommendations. Upon adoption, the LDP would replace the UDP and receive full weight for decision-making purposes.

Draft LDP Proposals Map & Key Site-Specific Policies

- 5.4.41 As shown on the draft LDP Proposals Map (Figures 5-3 and 5-4), the Project Site is located on land identified as safeguarded "*Coal Resources*" and "*Sand and Gravel*" resource, where draft LDP Policy RP12 applies. Draft Policy RP 12 states that "*development within mineral safeguarding areas that would permanently sterilise identified resources of aggregates and coal will only be permitted where it can be demonstrated that:*
- *The extraction of the mineral is impracticable, uneconomic or environmentally unacceptable;*
 - *The mineral has already been extracted or can be extracted satisfactorily prior to the development taking place;*
 - *The scale and location of the development would have no significant impact on the potential working of the resource; or*
 - *There is an overriding need for the development."*
- 5.4.42 The Project Site is also located within proximity of a designated Mineral Buffer Zone, where draft LDP Policy RP 14 applies. Draft Policy RP 14 states that, aside from mineral extraction and sensitive non-mineral development, any other development proposals will be "*carefully assessed to ensure that there would be no significant adverse effect on natural heritage, the amenity and well-being of neighbouring properties, or the quality and quantity of controlled waters."*
- 5.4.43 Draft Policy CV 2 sets a presumption against development in the countryside, except where it is for, inter alia, "*necessary infrastructure provision*". Development in the countryside is required to ensure that the integrity of the countryside is conserved and enhanced.

Figure 5-3 Extract from Draft LDP Proposals Map (Map 13: Mawr)

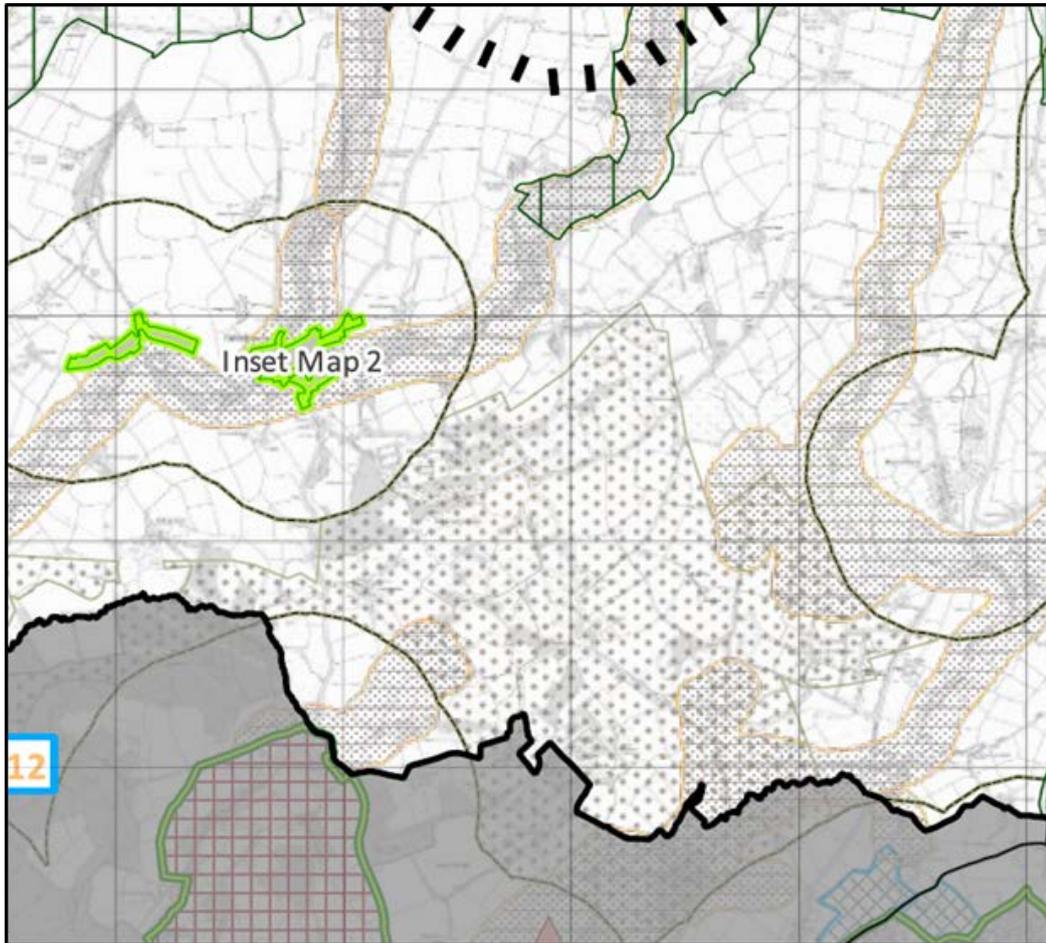
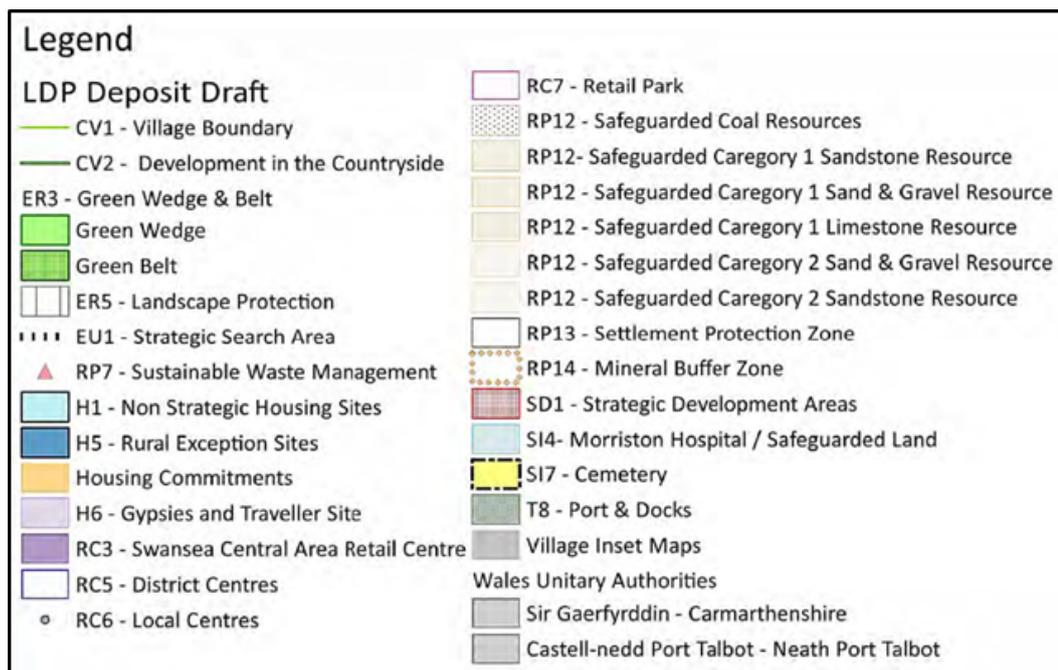


Figure 5-4 Extract from Draft LDP Proposals Map (Legend)



Development Proposals in the Surrounding Area

- 5.4.44 The Project Site is located approximately 1.2 km south of a Landscape Protection Area, where Policy ER5 applies, and a Strategic Search Area, where Policy EU 1 applies. Draft Policy ER 5 states that *“development will not be permitted that would have a significant adverse effect on the character and quality of the landscape and setting of the County”*. Within Special Landscape Areas, including the Mawr Uplands approximately 1.2 km north of the Project Site, priority will be given to protecting, managing and enhancing the character and quality of the area. Draft Policy EU 1 support proposals for large scale wind farms and their associated infrastructure within the Strategic Search Area.
- 5.4.45 The Project Site is located approximately 1.4 km to the north west of a Strategic Development Area (Policy SD 1(G)). The Project Site is also located approximately 900 m north-west of safeguarded land at Morryston Hospital (Policy SI 4). Draft Policy SD 1(G) relates to the Strategic Development Area and seeks to allocate a new sustainable settlement at land approximately 1.4 km north-west of M4 J46 at Llangyfelach, to the south-west of the Project Site, for *“comprehensive mixed use development of up to 850 homes during the Plan period, incorporating a mix of low-medium and high density residential, a new district centre with commercial units, primary school, a mix of public realm, open space and play provision, new community buildings, and a strategic business park.”*
- 5.4.46 Draft Policy SI 4 safeguards land adjacent to Morryston Hospital, approximately 900 m south-east of the Project Site, for future development, restricted to healthcare related uses associated with Morryston Hospital. Proposals are required to be *“delivered alongside appropriate new and enhanced highway infrastructure that will significantly improve the existing substandard road access leading to the site”*. A new access road is proposed as part of this proposal (Strategic Transport Strategy Table 9.2) to resolve road capacity issues from the roundabout immediately north of M4 J46.
- 5.4.47 Draft Policy RP 7 supports the development of sustainable waste management facilities in appropriate rural locations. Supporting paragraph 2.14.48 notes that preferred areas for new waste management facilities include the former Tip site at Felindre, approximately 620 km south of the Project Site.. The site at Felindre is identified specifically for the potential to accommodate a Combined Heat and Power (CHP) Facility which could provide heat or power for adjacent proposed developments.
- 5.4.48 In addition to the proposed sustainable settlement at Llangyfelach (Policy SD G), proposed development at the following Strategic Development Areas within proximity of the Project Site is allocated within the submitted LDP:
- Draft Policy SD A seeks to allocate land south of Glanffrwd Road at Pontarddulais, approximately 6 km west of the Project Site, for comprehensive, residential led, development of up to 720 homes,

incorporating a primary school, leisure and recreation facilities, public open space and appropriate community facilities, employment and commercial uses.

- Draft Policy SD C seeks to allocate land south of A4240, Penllergaer, approximately 4 km south-west of the Project Site, for comprehensive, residential led, mixed use development of up to 750 homes during the Plan period (and up to 1,000 homes beyond the Plan period), incorporating primary school, leisure and recreation facilities, public realm, public open space and appropriate community and commercial uses.
- Draft Policy SD E seeks to allocate land north of Clasemont Road, Morryston, approximately 1.5 km south of the Project Site, for comprehensive, residential led, mixed use development of up to 675 homes during the Plan period, incorporating primary school, leisure and recreation facilities, public realm, public open space and appropriate community and commercial uses.

5.4.49 The following draft LDP policies seek to allocate major residential-led development at sites within proximity of the Project Site:

- LDP Policy H1.11 – 60 dwellings at Land at Ramsey Road, Clydach, approximately 2.9 km east of the Project Site;
- LDP Policy H1.21 – 90 dwellings at Land east of Pontarddulais Road, Gorseinon, approximately 5 km west of the Project Site;
- LDP Policy H1.26 – 100 dwellings at Land at Carmel Road and Bryntirion Road, Pontlliw, approximately 2.95 km west of the Project Site;
- LDP Policy H1.30 – 50 dwellings at Land north of Llewellyn Road, Penllergaer, approximately 3.1 km south west of the Project Site; and
- LDP Policy H1.31 – 50 dwellings at Land at Bolgoed Road, Pontarddulais, approximately 4.3 km north west of the Project Site.

Other Relevant Draft LDP Policies

5.4.50 The draft LDP Written Statement sets out a vision, strategic objectives and growth strategy that addresses development opportunities and issues across the county. In addition to the site-specific policies set out above, the following draft LDP policies are also considered to be relevant.

5.4.51 Draft paragraph 1.2.2 sets out the overarching vision of the LDP, that *“The County will be a desirable place to live, work and visit that:*

- *"Capitalises on the distinctive relationship between its vibrant urban areas and outstanding rural and coastal environments;*
- *Supports a competitive and prosperous economy that acts as a focal point for the wider Swansea Bay City Region;*
- *Has sustainable, distinct communities, in both urban and rural locations, that benefit from sufficient good quality accommodation, supporting infrastructure, community facilities and opportunities for recreation;*
- *Is a thriving City Centre destination that offers excellent shopping facilities and supporting leisure and business opportunities, capitalising on its proximity to the waterfront;*
- *Celebrates and conserves its unique natural heritage and cultural and historic environments."*

5.4.52 The draft LDP vision will be delivered through a series of strategic objectives relating to *"Enhancing Communities, Facilities & Infrastructure"*, *"Delivering Economic Growth and Prosperity"*, and *"Fostering a High-Quality Environment"*. Of the objectives set out in Figure 4, those relevant to the Project are set out below:

- Ensure that communities have a mix of uses and facilities;
- Facilitate the provision of appropriate infrastructure to support communities and businesses;
- Encourage appropriate development of low carbon and renewable energy resources and energy infrastructure;
- Support the safeguarding and sustainable use of natural resources where appropriate;
- Support development that positions Swansea as an economically competitive place and an economic driver for the City Region;
- Facilitate growth and diversification of the local economy and an increase in high value, skilled employment;
- Promote and enhance a diverse and sustainable rural economy;
- Promote a sustainable development strategy that avoids significant adverse environmental impacts and respects environmental assets;
- Maintain and enhance green infrastructure networks;
- Support measures to minimise the causes and consequences of climate change; and

- Promote good design that is locally distinct, sustainable, innovative and sensitive to location.
- 5.4.53 Draft Policy PS 1 sets out the Plan’s sustainable development strategy which seeks to limit development in the countryside to exceptional circumstances.
- 5.4.54 Draft Policy PS 2 requires that development enhances the quality of places and spaces and responds positively to local context and character. In addition, a number of design principles are set out dependant on the nature, scale and siting of the proposal, including, inter alia:
- *“Have regard to important elements of local heritage, culture, landscape, townscape, views and vistas;”* (paragraph (i));
 - *“Integrate effectively with and enhance the County’s green infrastructure network;”* (paragraph (iv));
 - *“Provide appropriate parking and circulation areas;”* (paragraph (ix));
 - *“Maximise opportunities for sustainable construction, resource efficiency and contributions towards increased renewable or low carbon energy generation;”* (paragraph (xi));
 - *“Ensure resilience is not undermined and does not result in significant risk to human health, well-being or quality of life; and*
 - *“Ensure no significant adverse impact on natural heritage and built heritage assets.”* (paragraph (xiv)).
- 5.4.55 Draft Policy PS 4 forms the basis of a Sustainable Employment Strategy, which seeks to deliver up to 14,700 additional jobs over the Plan period.
- 5.4.56 Draft Policy IO 1 states that *“development must be supported by appropriate infrastructure, facilities and other requirements considered necessary as part of the proposal,”* which must be provided in a timely and coordinated manner. Where necessary, *“planning obligations will be sought to ensure that the effects of developments are fully addressed in order to make the development acceptable.”*
- 5.4.57 Draft Policy IO 2 requires developers to *“maximise added benefits from the development in relation to the creation of training and job opportunities.”*
- 5.4.58 Draft Policy HC 1 seeks to preserve or enhance the County’s distinctive historic and cultural environment by requiring high quality design standards. Similarly, draft Policy HC 2 seeks to preserve or enhance the County’s buildings and features of historic importance.
- 5.4.59 Draft Policy HC 3 states that *“The Welsh language will be safeguarded and promoted throughout the County. Within the Language Sensitive Area, the following developments will be required to submit a Welsh Language Action*

Plan setting out the measures to be taken to protect, promote and enhance the Welsh Language:

- i. Residential development for 10 or more dwellings; and*
- ii. Retail, commercial or industrial development with a total floorspace of 1000 sq.m or more.”*

- 5.4.60 Draft Policy SI 1 states that health inequalities will be reduced and healthy lifestyles encouraged by ensuring that development proposals, inter alia, “do not result in significant risks to life, human health or well-being, particularly in respect of air, noise, light, water or land pollution.”
- 5.4.61 Draft Policy SI 8 states that “development must be designed to promote safe and secure communities and minimise the opportunity for crime”.
- 5.4.62 Draft Policy ER 1 requires that development proposals take into account the following principles to mitigate against the effects of climate change, adapt to its impacts, and to ensure resilience:
- Reduce carbon emissions;
 - Protect and increase carbon sinks;
 - Adapt to the implications of climate change at both a strategic and detailed design level;
 - Promote energy and resource efficiency and increase the supply of renewable and low carbon energy;
 - Avoid unnecessary flood risk by assessing the implications of development proposals within areas susceptible to flooding and preventing development that unacceptably increases risk, and
 - Maintain ecological resilience.
- 5.4.63 Draft Policy ER 2 requires that development maintain or enhance the County’s multi-functional green infrastructure network.
- 5.4.64 Draft Policy ER 6 states: “Development will not be permitted that would result in a likely significant adverse effect to sites of international or national nature conservation importance. Development that would affect locally designated sites of nature conservation importance should maintain or enhance the nature conservation interest of the site...”
- 5.4.65 Draft ER 8 states that development proposals that would have a significant adverse effect on the continued viability of habitats and species “...will only be permitted where:

- i. The need for development outweighs the nature conservation importance of the site;*
- ii. The developer demonstrates that there is no satisfactory alternative location for the development which avoids nature conservation impacts;*
- iii. Effective mitigation measures are provided by the developer; and*
- iv. Any unavoidable harm is minimised by effective mitigation to ensure that there is no reduction in the overall nature conservation value of the area.”*

5.4.66 Draft Policy ER 9 states: “Development proposals will be expected to maintain, protect and enhance ecological networks and features of importance for biodiversity... Development proposals that could result in a significant adverse effect on the connectivity of ecological networks and features of importance for biodiversity will only be permitted where:

- i. The need for the development outweighs the nature conservation value of the site;*
- ii. It can be demonstrated that there is no satisfactory alternative location for the development;*
- iii. A connected element of the natural resource is retained as part of the design of the development; and*
- iv. Compensatory provision will be made of comparable ecological value to that lost as a result of the development.”*

5.4.67 Draft Policy ER 10 states that development will not be permitted that would cause significant adverse effect to geological or geomorphological Sites of Special Scientific Interest (SSSIs). Development that would affect regionally important geological or geomorphological sites (RIGs) should maintain the geological or geomorphological interests of the site.

5.4.68 Draft Policy ER 11 states: “Development that would adversely affect trees, woodlands and hedgerows of public amenity, natural/cultural heritage value, or that provide important ecosystem services will not normally be permitted...”

5.4.69 Draft Policy T 1 requires that “Development must be supported by appropriate transport measures and infrastructure...” Development that would have an unacceptable impact on the safe and efficient operation of the transport network will not be permitted.

5.4.70 Draft Policy T 5 sets out a series of design principles for transport infrastructure, including ensuring that the design of development, inter alia:

- *“Allows for the safe, efficient and effective movement of vehicles, inclusive of service vehicles;”* (paragraph (iii));
- *“Does not give rise to any significant adverse effect on the natural heritage, and the historic and cultural environment is preserved and enhanced;”* (paragraph (vii)); and
- *“Maintains the character of rural lanes and public paths;”* (paragraph (viii)).

5.4.71 Draft Policy T 7 requires that acceptable alternative routes are identified and provided where development *“significantly adversely affects the character, safety, enjoyment and convenient use of a Public Right of Way...”*

5.4.72 In addition to supporting large scale wind farm developments within the Strategic Search Area (referenced above), draft Policy EU 1 supports proposals for renewable or low carbon energy development across CCS, subject to the following criteria:

- “The siting, design, layout, type of installation and materials used do not have a significant adverse effect on the characteristics and features of the proposed location;”*
- The development would not result in unacceptable loss of public amenity or public accessibility to the area;*
- The development would not result in significant adverse effects on natural heritage or historic environment, or visual amenity either individually or cumulatively;*
- There would be no significant adverse effect on the Gower AONB;*
- There would be no significant adverse impact on water quality and quantity;*
- The development would not result in the permanent sterilisation of minerals resources;*
- The development would not compromise the transport network;*
- The development would not interfere with aircraft operations or telecommunications;*
- There would be no loss of carbon sinks, or that on-site loss can be adequately mitigated; and*
- The satisfactory removal of infrastructure and remediation and/or restoration of the natural environment, would be undertaken in accordance with an aftercare scheme to be agreed with the Council prior to the development being carried out.”*

- 5.4.73 Draft Policy RP 1 seeks to prevent development that would result in a “*significant risk to: life; human health and well-being; property; controlled waters; or the natural and historic environment...*” particularly in respect of:
- i. *“Air, noise or light pollution;*
 - ii. *Flood risk;*
 - iii. *The quality and quantity of water resources;*
 - iv. *Land contamination;*
 - v. *Land instability or subsidence;*
 - vi. *Sustainable development of mineral resources; and*
 - vii. *Sustainable waste management.”*
- 5.4.74 Draft Policy RP 2 requires that: “*Where development could lead to exposure to a source of air, noise or light pollution, it must be demonstrated that appropriate mitigation measures will be implemented, and incorporated into the design of the development...*”
- 5.4.75 Draft Policy RP 3 states that: “*Development that compromises the quality of the water environment, or does not comply with good water resource management, will not be permitted. Development proposals must make efficient use of water resources and, where appropriate, contribute towards improvements to water quality...*”
- 5.4.76 Draft Policy RP 4 states that development will not be permitted in areas at risk of flooding, unless it can be demonstrated that “*the development can be justified in line with national guidance and is supported by a technical assessment that verifies that the new development is designed to alleviate the threat and consequences of flooding*”.
- 5.4.77 Draft Policy RP 5 states; “*Development proposals on land where there is a risk from contamination or landfill gas will not be permitted unless it can be demonstrated that measures can be taken to satisfactorily overcome any significant risk to life, human health, property, controlled waters, or the natural and historic environment.*”
- 5.4.78 Draft Policy RP 6 states: “*Development which would create, affect or might be affected by unstable or potentially unstable land will not be permitted where there would be a significant direct risk to life, human health, property, buildings and structures, or the natural heritage on the site or in its vicinity...*”
- 5.4.79 Draft Policy RP 9 requires development to incorporate, as appropriate, “*adequate and effective provision for the storage, recycling and other sustainable management of waste, and allow for appropriate access arrangements for recycling and refuse collection vehicles and personnel.*”

Supplementary Planning Guidance

- 5.4.80 CCS has produced Supplementary Planning Guidance (SPG) to support the implementation of adopted UDP planning policies.
- 5.4.81 The Planning Obligations SPG, published by CCS in March 2010, is an SPG document of potential relevance to the Application. The Planning Obligations SPG explains how the Council will use obligations, identify the types of development for which obligations can be required, and explain both the legal content and the procedures involved when entering into obligations.
- 5.4.82 The SPG advises that *“Planning obligations are secured by a formal deed whether “Unilaterally” or by “Agreement”. It is anticipated that the majority of planning contributions will be secured through the prior completion of a Section 106 Agreement.... The Council will consider Unilateral Undertakings where they are appropriately worded.”* (paragraph 1.3).
- 5.4.83 The SPG advises that *“Only development proposals with significant impacts will need an Agreement to be completed before planning permission is granted. If an Agreement is required the applicant will be advised of the main requirements and reasons. When negotiating the level of contributions that will be required, the LPA will take into account any abnormal costs that developers may face and any implications to the overall viability of the proposal”* (paragraph 1.4).
- 5.4.84 Other SPGs may be of relevance in detailed methodologies in the environmental impact assessment, as reported on in the ES (Document Reference 6.1).
- 5.4.85 Background technical documents prepared to inform the preparation of the Deposit LDS may also be of relevance, including the Strategic Flood Consequences Assessment, Health Impact Assessment, LDP Equality Impact Assessment and Strategic Transport Assessment. Swansea Environment Strategy 2006 and Ten Year Progress Review (2016).
- 5.4.86 The Swansea Environment Strategy (SES), published by Swansea Environmental Forum (SEF) in 2006, provides a long-term vision and strategic priorities for the natural and built environment in Swansea.
- 5.4.87 SEF is the lead strategic partnership for all aspects of the natural and built environment in the City and County of Swansea. It is an independent membership organisation, initially set-up in 1985, which brings together individuals, statutory bodies, businesses and voluntary groups to promote environmental sustainability and develop collaborative projects to improve our natural and urban environments.
- 5.4.88 The SES establishes a 2020 vision and a series of priorities for:
- the natural environment and biodiversity;

- the built environment and energy use;
- water, land and waste management;
- sustainable transport and air quality; and
- environmental awareness and action.

Table 5-2: SES Themes and Vision

Theme	2020 Vision
The Natural Environment and Biodiversity	Swansea's unique and diverse natural environment will be protected, enhanced and promoted to maximise social, economic and environmental well-being.
The Built Environment and Energy Use	Swansea will have strong, sustainable and distinctive communities where everyone can enjoy a clean, safe and high-quality built environment with affordable housing, public spaces and considerably-designed and resource-efficient buildings.
Water, Land and Waste Management	Swansea's water resources, land and waste will be managed sustainably to maximise benefits for everyone and minimise risks to the environment and human health.
Sustainable Transport and Air Quality	Swansea's citizens will live near to work opportunities, leisure facilities and essential services, have access to a choice of convenient and efficient transport options, and enjoy clean air.
Environmental Awareness and Action	All people living in, working in and visiting Swansea will understand, respect and appreciate our environment and will participate in positive actions towards sustainability.

5.4.89 The Ten Year Progress Review demonstrates that progress has been made under each of the Environment Strategy's five themes, most significantly in waste management, sustainable building and energy use, managing flood risk, and community engagement.

Swansea Local Biodiversity Strategy and Action Plan

- 5.4.90 The Swansea Biodiversity Partnership produced the Swansea Local Biodiversity Strategy and Action Plan in 2005. The document provides a strategic framework and series of detailed species and habitat action plans looking at how individuals and organisations could work to try and halt biodiversity loss in Swansea.
- 5.4.91 The document was prepared with the following aim: *“To conserve, enhance and promote the special qualities of Swansea’s unique and ecologically diverse natural environment, and to maximise the contribution it makes to the social, economic and environmental wellbeing of the area”.*

6 Assessment

6.1 Introduction

- 6.1.1 Section 104 of the PA 2008 provides that in making decisions on applications, the SoS must have regard (amongst certain other documents and matters) to any relevant NPS and must decide applications in accordance with such relevant NPS(s) unless the adverse impacts of the proposal would outweigh its benefits (or in certain other limited circumstances).
- 6.1.2 Section 104 of the PA 2008 also requires the SoS to have regard to any Local Impact Report and other matters which the SoS *“thinks are both important and relevant to [the SoS’s] decision”*.
- 6.1.3 This chapter of the Planning Statement provides an assessment of the Project in regard to relevant NPS guidance contained within NPS EN-1 and NPS EN-2, as well as other matters which are considered to be both *“important and relevant”* (Section 104, PA 2008).
- 6.1.4 This chapter is structured as follows:
- 6.2 National Policy Statements (NPS EN-1, NPS EN-2, NPS EN-4 and NPS EN-5);
 - 6.3 Welsh Planning Policy (including PPW and associated TANs); and
 - 6.4 Local Planning Policy (including CCS UDP and CCS draft LDP).

6.2 National Policy Statements

Overarching National Policy Statement for Energy (EN-1)

General Approach

- 6.2.1 NPS EN-1 sets out the Government’s overall policy towards the delivery of major energy infrastructure, as referred to in section 5.2 of this Planning Statement.
- 6.2.2 Part 3 of NPS EN-1 sets out the need for new nationally significant energy infrastructure projects, which is considered in Chapter 4 of this Planning Statement. This chapter of the Planning Statement does not therefore consider the need for the Project further.
- 6.2.3 Parts 4 and 5 of NPS EN-1 set out general assessment principles and explain potential impacts of energy infrastructure which will be considered in deciding applications. With reference to Chapter 5 of this Planning Statement, this section provides an assessment of the Project in respect of Parts 4 and 5 of NPS EN-1 as set out in Table 6-1.

Table 6-1 NPS EN-1 Assessment

NPS EN-1 Section	Issue	Planning Statement Reference	
		Policy Requirement	Assessment
4.1	General points	5.2.6 – 5.2.13	6.2.4 – 6.2.10
4.2	Environmental Statement	5.2.14	6.2.11 – 6.2.13
4.3	Habitats and Species Regulations	5.2.15	6.2.14 – 6.2.15
4.4	Alternatives	5.2.16	6.2.16 – 6.2.35
4.5	Criteria for “good design” for energy infrastructure	5.2.17 – 5.2.20	6.2.36 – 6.2.44
4.6	Consideration of Combined Heat and Power (CHP)	5.2.21	6.2.45 – 6.2.49
4.8	Climate change adaptation	5.2.22	6.2.51
4.9	Grid connection	5.2.23	6.2.52 – 6.2.55
4.10	Pollution control and other environmental regulatory regimes	5.2.24	6.2.56 – 6.2.57
4.11 / 4.12	Safety / Hazardous Substances	5.2.25 – 5.2.26	6.2.58 – 6.2.60
4.13	Health	5.2.27	6.2.61 – 6.2.67
4.14	Common law nuisance and statutory nuisance	5.2.28	6.2.68 – 6.2.70
4.15	Security considerations	5.2.29	6.2.71 – 6.2.75
5.2	Air quality and emissions	5.2.31	6.2.76 – 6.2.81
5.3	Biodiversity and geological conservation	5.2.32	6.2.82 – 6.2.95
5.4	Civil and military aviation and defence interests	5.2.33	6.2.96 – 6.2.98
5.6	Dust, odour, artificial light, smoke, steam and insect infestation	5.2.34	6.2.99 – 6.2.103
5.7	Flood risk	5.2.35	6.2.104 – 6.2.106

5.8	Historic environment	5.2.36	6.2.107 – 6.2.110
5.9	Landscape and visual	5.2.37	6.2.111 – 6.2.116
5.10	Land use including open space, green infrastructure and Green Belt	5.2.38	6.2.117 – 6.2.122
5.11	Noise and vibration	5.2.39	6.2.123 – 6.2.127
5.12	Socio-economic	5.2.40	6.2.128 – 6.2.137
5.13	Traffic and transport	5.2.41	6.2.138 – 6.2.143
5.14	Waste management	5.2.42	6.2.144 – 6.2.147
5.15	Water quality and resources	5.2.43	6.2.148 – 6.2.154

General Points

- 6.2.4 The Power Generation Plant is classified as a NSIP under Section 15 of the PA 2008, as explained at section 2.4 of this Planning Statement, and the urgent need for the Project is explained at Chapter 4 of this Planning Statement. As such, in accordance with **paragraph 4.1.2 of NPS EN-1**, there should be a presumption in favour of granting consent for the Project.
- 6.2.5 As explained at section 7.3 of this Planning Statement, and with regards to **paragraph 4.1.4 of NPS EN-1**, the Project will provide a number of benefits and will contribute to the urgent need for energy generation, as identified throughout NPS EN-1, the Gas Generation Strategy (DECC, 2012), and the National Infrastructure Delivery Plan 2016-2021 (HM Treasury, 2017). The Project would contribute materially to the immediate and medium term needs for flexible, reliable, peak load power generation and facilitate the transition to a low carbon economy. The chosen technology for a peaking plant would help to 'balance out' the grid at times of peak electricity demand and help to support the grid at times when intermittent renewable sources cannot generate electricity. Furthermore, as set out in Chapter 14 of the ES (Document Reference 6.1), the Project will deliver positive impacts through employment creation in construction, operation and decommissioning stages; and supply chain linkages for goods and services and workers spending in the local economy.
- 6.2.6 An EIA has been undertaken to consider the likely impacts of the Project in respect of air quality; noise and vibration; ecology; water quality and resources; geology, ground conditions and hydrogeology; landscape and visual impacts assessment; traffic, transport and access; archaeology and

cultural heritage; socio-economics; waste; health; and EMF. The findings of the EIA are presented in the ES (Document Reference 6.1). The potential adverse impacts of the Project are also summarised at section 7.2 of this Planning Statement. The likely impacts have been minimised wherever possible, and other effects avoided through appropriate specification, siting and design.

- 6.2.7 With regards to **paragraph 4.1.5 of NPS EN-1**, the Application has sought to consider the provisions of CCS' UDP and the emerging LDP. Matters which are both important and relevant from the adopted and emerging development plan documents are set out and considered in the context of the Application at section 6.4 of this Planning Statement. Any conflicts are considered in accordance with the decision-making framework in PA 2008 section 104, and in light of the clear statement in paragraph 4.1.5 that in the event of a conflict between the development plan and NPS, the NPS prevails for the purpose of decision making under the PA 2008.
- 6.2.8 The Applicant has held discussions with CCS during the preparation of the requirements set out in the draft DCO (Document Reference 3.1), in regards to **paragraph 4.1.7 of NPS EN-1** and has sought to propose reasonable and appropriate controls necessary for the acceptability of the proposed development, in line with established law and practice as outlined in the National Planning Practice Guidance and Welsh Government Circular 16/2014. The requirements also take due account of advice and preferences of Welsh agencies such as Welsh Government Transport on previous Welsh DCO applications (cf. Hirwaun Power Station; Brechfa Forest Wind Farm) to inform drafting of requirements that are reasonable, enforceable and precise. The Applicant will continue to engage with CCS and other agencies and seeks to record the level of agreement reached as to each requirement, within the Statement of Common Ground with CCS, and other agencies if relevant, before and during the examination.
- 6.2.9 Discussions have been held with CCS as to the need for and scope of planning obligations, in regards to **paragraph 4.1.8 of NPS EN-1**, and a statement of the proposed Section 106 Heads of Terms (Document Reference 10.3) are enclosed in the Application. Further discussions will be held with CCS in order to agree a full development consent obligation and progress on the draft agreement will be described in a Statement of Common Ground to be submitted prior to the Examination's Preliminary Meeting.
- 6.2.10 The Applicant has had regard to the anticipated market regime and other aspects of viability and technical feasibility at relevant stages of the design of the Project, in accordance with **paragraph 4.1.9 of NPS EN-1**.

Environmental Statement

- 6.2.11 An ES (Document Reference 6.1) has been prepared and accompanies the Application, in accordance with **paragraph 4.2.1 of NPS EN-1**. The ES (Document Reference 6.1) includes an assessment of all likely significant effects at all stages of the Project, in accordance with **paragraph 4.2.3 of**

NPS EN-1, in respect of air quality; noise and vibration; ecology; water quality and resources; geology, ground conditions and hydrogeology; landscape and visual impacts; traffic, transport and access; archaeology and cultural heritage; and socio-economics.

6.2.12 The ES sets out the measures taken to avoid and to mitigate likely significant environmental effects, in accordance with **paragraph 4.2.2 of NPS EN-1**.

6.2.13 In accordance with **paragraph 4.2.5 of NPS EN-1**, the ES (Document Reference 6.1) contains information on the cumulative effects of the Project in combination with the effects of other development, including projects for which consent has been sought or granted, as well as those already in existence, in respect of air quality; noise and vibration; ecology; water quality and resources; geology, ground conditions and hydrogeology; landscape and visual impacts; traffic, transport and access; archaeology and cultural heritage; and socio-economics.

Habitats and Species Regulations

6.2.14 APL consulted NRW during EIA Scoping, non-statutory meetings and statutory Section 42 consultation, as recorded within the Consultation Report (Document Reference 5.1.0) and ES (Document Reference 6.1) and in accordance with **paragraph 4.3.1 of NPS EN-1**, with regards to the potential ecological impacts of the Project and the potential need for a Habitat Regulations Assessment (HRA) Screening Assessment.

6.2.15 To assist the Examining Authority/SoS in considering whether the Project may have a significant effect on a European site, or on any site to which the same protection is applied as a matter of policy, either alone or in combination with other plans or projects, a HRA Screening Assessment was performed, which concluded that there will be no 'Likely Significant Effects' either alone or 'in combination' on the features of the European sites. No further assessment, by way of an Appropriate Assessment (Stage 2 of the HRA process) is considered necessary, therefore a No Significant Effects Report has been prepared to accompany the application (Document Reference 5.5).

Project Development and Alternatives

6.2.16 In accordance with **paragraph 4.4.1 of NPS EN-1**, it is not necessary for an applicant from a policy perspective to demonstrate that the proposed project represents the best option. As required under the EIA regulations and acknowledged in **paragraph 4.4.2 of NPS EN-1** the ES (Document Reference: 6.1), provides an account of the consideration of the main alternatives studied by APL, including:

- Alternative development sites;
- Alternative technologies for electricity generation;
- Alternative layouts and access for the Power Generation Plant;

- Alternative routes for the Gas Connection; and
- Alternative solutions for the Electrical Connection.

6.2.17 Additionally, the Consultation Report (Document Reference: 5.1), explains the Project's development and the options that the Applicant has consulted on at relevant stages prior to making the Application. Table 5-2 of the Consultation Report sets out the Project Consultation Milestones which shows the various stages of consultation held. Chapter 10 of the Consultation Report explains further how community and other stakeholders have influenced considerations as to layouts for the Power Generation Plant and alternative options for the Electrical Connection and the Gas Connection through a thorough, effective and proportionate consultation process to enable the range of potentially interested parties to express their views.

Alternative Development Sites

6.2.18 In deciding upon the location of the Project Site, the Applicant undertook a detailed feasibility assessment having regard to a number of technical, environmental, and economic factors in accordance with NPS EN-1. The key factors considered necessary in selecting a suitable site for a project such as this one were broadly fourfold; technical, environmental, economic, and in line with local planning policy.

6.2.19 As part of a detailed feasibility assessment, the Applicant looked at a range of sites around the UK to support power generation plants of this nature. This search for potential power generation plant sites across the UK was focused on areas that were capable of meeting the Applicant's strategic project development criteria:

- Acceptable proximity to the national gas transmission system & the national electricity transmission system or local distribution networks;
- Located within areas that are net importers of electricity; and
- Located within areas of compatible land use designation/s.

6.2.20 In terms of technical constraints, the size of the site (i.e. large enough to support a power generation plant of up to 299 MW and integral infrastructure) and the proximity of a site to appropriate gas and electrical connection points were both key considerations.

6.2.21 From an environmental perspective, the site must have due regard to close sensitive receptors such as residential properties or sites of ecological importance (to avoid unacceptable impacts from noise and visual disturbance), the current nature of the surrounding area (to limit impacts on the landscape character of the area), previous site uses and land quality (to avoid sterilisation of the best and most versatile agricultural land or mineral assets) and proximity to sensitive ecological habitats.

6.2.22 Based on these factors, the Project Site was considered suitable for the following reasons:

- It is in close proximity to a suitable electrical connection point;
- It is in close proximity to a suitable gas connection point;
- The Project Site does not include any nationally important environmental designations;
- The land available is of an adequate size to accommodate the Power Generation Plant, Gas Connection and Electrical Connection;
- The Project Site is largely situated on poor quality agricultural land (improved grassland classified as Grade 4 agricultural land);
- It is in close proximity to similar industrial developments including the Felindre Gas Compressor Station and Swansea North Substation;
- The surrounding network is within an area of net electricity import; and
- It is in close proximity to a well-developed road network to the Project Site.

6.2.23 The Applicant further considers that the Project Site has been delineated, laid out and designed suitably, and proposes appropriate mitigation wherever feasible in line with relevant planning policy considerations. Further assessment of these considerations is provided elsewhere in Chapter 6 of this document.

Alternative technologies for electricity generation

6.2.24 The following technology options have been considered for the Power Generation Plant: OCGT plant; Combined Cycle Gas Turbine (CCGT) plant; Reciprocating Gas Engines (RGE) plant and CHP Plant.

6.2.25 OCGT is considered to be the most suitable technology choice for generating up to 299 MW as a peaking plant and operating at up to 2,250 hours at the Project Site based on the following environmental, technical and feasibility considerations:

- Visual impact: OCGT plants require shorter stack(s) compared to CCGT plant and therefore are less visually intrusive in views from the surrounding environment;
- Water resources: Since no cooling is required for the condensing of steam, the cooling requirements of OCGT plants are significantly lower than, for example, CCGT plants. The auxiliary cooling requirements (for lubrication oil, etc.) would be met via dry air cooling through the use of fin-fan coolers or Air Cooled Condensers (ACC).

The water requirement of a OCGT plant is therefore significantly lower than for CCGT plants;

- Noise and available space: noise levels from an OCGT plant would typically be lower than for an RGE plant. A larger number of RGE units would be required at the Generating Equipment Site to generate up to 299 MW. Spatially this may not be possible;
- Financial: based on the anticipated electricity market, it is essential that the Power Generation Plant of the size proposed would be particularly cost effective, as it would be called upon to operate flexibly to balance out the National Grid and meet changing demands of customers; and
- Start-up times: OCGT plants are able to start up and shut down much quicker than similar sized CCGT plants and are, therefore, better suited to meeting variable demands.

6.2.26 Uncertain market conditions in 2014 led to the consideration of a number of different OCGT technologies and, as such, the 2014 PEIR and associated formal consultation process was based on the construction and operation of between 1 and 5 Gas Turbine Generators. However, greater clarity on the capacity market rules, further engagement with the equipment manufacturers, and consultation with the local community and relevant stakeholders has led to the decision that a single Gas Turbine Generator is the most appropriate technology solution for the Project. These changes have been consulted on in the 2018 PEIR and are reported in the ES (Document Reference 6.1) and Consultation Report (Document Reference 5.1.0).

Alternative Layouts and Access for the Power Generation Plant

6.2.27 The design and layout of a OCGT is primarily informed by its operational requirements. A limited range of site layouts were examined before culminating in the final design, taking into account the following constraints which were established through engagement and consultation (as described in the Consultation Report, Document Reference 5.1) as well as the technical studies supporting the ES (Document Reference 6.1):

- Avoidance of utilities such as the 1.68 m cast iron water main and the decommissioned Oil Pipeline (which bisect the site under the Gallops), and the National Gas Transmission System;
- Avoidance of landfill to north;
- Avoidance of higher topography to the north west which would be more visible in key views;
- Avoidance of woodland to the east;

- Avoidance of solar farms to the north, south, east and west; and
- Avoidance of field boundaries, ancient woodland and mature trees as far as reasonably possible (being wildlife/ heritage features).

6.2.28 The final layout of the Project Site has also been determined by the following main factors in relation to each of the components:

- Generating Equipment – The Gas Turbine Generator and stack require the largest area of land-take as compared to the other components of the Generating Equipment. It is also best practice for the layout of the Generating Equipment Site to make the Generating Equipment easily accessible by the operators and maintenance staff from the control and administration building. These were key considerations which influenced the siting of the Generating Equipment Site. However, the subsequent identification of a water main, which crosses the Generating Equipment Site and Laydown Area from northwest to southeast, and discussions with Welsh Water, have influenced where the Generating Equipment will be located within the Generating Equipment Site. The Generating Equipment is therefore positioned to the north of the Water Main.
- Access to the Generating Equipment Site – Two options were initially considered, comprising an access option from the north via the Rhyd-y-pandy Road (Option 1) and an access option from the west via the B4489 (Option 2). Access Option 2 was the option taken forward in the 2018 PEIR at the time of Phase 2 statutory consultation and is referred to elsewhere in the ES (Document Reference 6.1) as the Access Road. The main reasons for this choice included that the majority of the public consulted during 2014 supported Access Option 2 in preference to Access Option 1, as it would result in a lower adverse impact on traffic by using a shorter, more direct route and would avoid the roads leading to Morryston Hospital. This option would also minimise the amount of construction required, as part of the access is existing.
- Access from the Substation to the Generating Equipment Site – Within the 2018 PEIR, two options (Option A and Option B) were considered for the purpose built new section of Access Road from the Substation to the Generating Equipment Site. The key advantage to Option A was its complete avoidance of the Ancient Woodland area adjacent to the Substation and Felindre Gas Compressor Station. Option B performed better in terms of impacts to National Grid's current and future planned operations, sustainability in relation to materials to be excavated and removed, and Project cost. However, consultation feedback in response to the 2018 PEIR highlighted the importance of avoiding the Ancient Woodland. Therefore, in response to consultation feedback, APL undertook to realign the route of the new section of Access Road

associated with Option B. Option B was modified to curve further south and avoid the area of Ancient Woodland.

Alternative Routes for the Gas Connection

- 6.2.29 A gas connection feasibility study was undertaken in March 2014 to define and evaluate the options available for connecting the Generating Equipment to a suitable source of fuel gas. This identified Feeder 28 of the National Gas Transmission System or a nearby Local Transmission System pipeline as possible connection points.
- 6.2.30 Investigations to identify specific route corridor options to the National Gas Transmission System or Local Transmission System pipelines within a predetermined Gas Connection Opportunity Area were carried out, considering in particular the length, the number of crossings required, environmental effects and cost.
- 6.2.31 Four principal potential connection route options were explored further leading to the identification of a single preferred route for the Gas Connection. Due regard was paid to relevant factors including environmental, planning, safety, engineering and constructability in selecting the preferred route.
- 6.2.32 Route 2b was chosen as the preferred route for the Gas Connection and is therefore the route which has been fully assessed in the ES (Document Reference 6.1). Although not the shortest route, it has lower risks and avoids ecologically significant habitats, such as rough pasture and deciduous woodland.

Alternative Solutions for the Electrical Connection

- 6.2.33 A grid connection assessment was undertaken for the Project in March 2014 in order to define and evaluate the options available for connecting the Generating Equipment to the NETS for the export of electricity. The Project will connect into a Gas Insulated Switchgear (GIS) generator bay within the Substation. The Applicant received an offer of a Bilateral Connection Agreement and Construction Agreement from National Grid Electricity Transmission plc (NGET) on 23rd February 2018 (the Connection Agreement) to connect the Generating Equipment to the NETS.
- 6.2.34 Both underground cables and overhead lines were initially considered. However, underground cables were selected as the preferred option in order to minimise visual impact. In the 2014 PEIR, it was noted that the cable would be installed beneath the road. It has now been decided that the cable will be laid alongside the road for ease of maintenance.
- 6.2.35 The Electrical Connection Opportunity Area, to the south west of the Generating Equipment Site, is the area within which the route for the Electrical Connection has been identified. In July 2014, the chosen route was identified during a site walkover of the Electrical Connection Opportunity Area. A limited number of route corridor options for the Electrical Connection

were considered, as the most appropriate option i.e. the shortest, most direct route from the Generating Equipment Site to the Substation, requiring the least amount of land take and avoiding any statutory designated sites or valued habitats, was available. This negated the need to assess any less favourable options.

Good Design

- 6.2.36 In accordance with **paragraph 4.5.1 of NPS EN-1**, APL has sought to employ good design at all stages of the Project's development. APL has undertaken suitable studies of the local habitats, accesses, heritage features and landscape to enable the design to respond to place. Suitable setbacks and replacement/reinforcement and new planting is proposed to integrate the Project into its local ecological and landscape context and provide mitigation for habitat loss. Impacts on the drainage regime of the local area will be minimised through the provision of ponds and other natural and semi natural features providing ecological mitigation. Careful management of soils during construction works pursuant to the Outline Construction Environmental Management Plan (CEMP) (Appendix 3.1 of Document Reference 6.2) shall facilitate plant growth. The process of designing these and reasons for design choices are set out in: ES (Document Reference 6.1), specifically Chapters 5, 8, 9, 11, 12, 13, and the Flood Consequences Assessment (Document Reference 6.2, Appendix 9.1), and the Outline CEMP (Appendix 3.1 of Document Reference 6.2). The resultant design principles that will guide detailed design are set out in the Design Principles Statement (Document Reference 10.2) which is secured by a requirement in the draft DCO (Document Reference 3.1).
- 6.2.37 In accordance with **paragraph 4.5.3 of NPS EN-1**, and as set out in the ES (Document Reference 6.1), the siting has sought to demonstrate good design having regard to a number of constraints in the immediate vicinity, namely:
- Avoidance of utilities such as the 1.68 m cast iron water main and the decommissioned Oil Pipeline (which bisect the site under the Gallops), and the National Gas Transmission System;
 - Avoidance of landfill to north;
 - Avoidance of higher topography to the north west which would be more visible in key views;
 - Avoidance of woodland to the east;
 - Avoidance of solar farms to the north, south, east and west; and
 - Avoidance of field boundaries, ancient woodland and mature trees as far as reasonably possible (being wildlife/ heritage features).
- 6.2.38 Furthermore, the Outline Landscape and Ecology Mitigation Strategy (Document Reference 6.2, Appendix 3.4) and Outline Landscape and

Ecology Mitigation Plan (Document Reference 6.3, Figure 3.6) are secured by a requirement in the draft DCO (Document Reference 3.1) and demonstrates the applicant's regard to minimising and mitigating effects on the existing landscape, and the reinforcement to the existing landscape features that will be provided where possible.

- 6.2.39 In addition, in accordance with **paragraph 4.5.3 of NPS EN-1**, and as far as is reasonably practical, the Power Generation Plant will use materials which can be disposed of sustainably (e.g. easily re-usable or recyclable) when the plant has reached the end of its life but primarily have been selected for their durability and safety across a 25-year lifespan. The technology chosen, OCGT, has an inherently low requirement for process water. The Outline Landscape and Ecology Mitigation Strategy (Document Reference 6.2, Appendix 3.4) will enhance the area's biodiversity through the retention of existing woodland and the planting of belts of trees to increase the amount of woodland in the area and the reinstatement of planting where possible and appropriate. Careful management of soils will be undertaken during construction works pursuant to the Outline CEMP (Document Reference 6.2, Appendix 3.1) to facilitate plant growth. Habitat management and other ecological works will be provided pursuant to the Outline Landscape and Ecology Management Strategy (Document Reference 6.2, Appendix 3.4). Flood risk has been assessed and has informed the layout and levels of the Generating Equipment Site and other parts of the Project in the Flood Consequences Assessment (Document Reference 6.2, Appendix 9.1). Accordingly, it is considered that sustainability, durability, and adaptability have been suitably considered and are secured in the draft DCO (Document Reference 3.1).
- 6.2.40 The process of design evolution, and the reasons for key design choices, with regards to **paragraph 4.5.4 of NPS EN-1**, are documented in the ES, in particular, Chapter 5 (Document Reference 6.1) and the Consultation Report (Document Reference 5.1), in particular Chapter 10. The Consultation Report (Document Reference 5.1.0) explains the consultation process and the responses received which influenced the design. Visual impact, access routes/road and landscape treatment were amongst the design matters that were influenced by comments from consultees.
- 6.2.41 The Design Principles Statement (Document Reference 10.2.) draws together the findings of the various documents as they relate to design, and establish firm and deliverable commitments to good design to guide the detailed design. These commitments are secured by a requirement in the draft DCO (Document Reference 3.1) to the effect that implementation is undertaken substantially in compliance with the Design Principles Statement.
- 6.2.42 To assist with decision-making under **paragraph 4.5.4 of NPS EN-1**, the main operational, safety and security requirements are set out in the ES. The authorised works on the Works Plans (Document Reference 2.3) are designed to achieve an appropriate balance between the likely operational requirements (and thus a deliverable energy generation project) and

minimising visual effects. The Design Principles (Document Reference 10.2) also assists in achieving this balance. The design has also sought to use the site layout in the most efficient way, by locating plant items in close proximity to connections (e.g. gas and electrical infrastructure) and by locating the Power Generation Plant so that it benefits from the maximum screening effects of the local topography. The work packages and the Design Principles Statement (Document Reference 10.2) are designed to achieve an appropriate balance between the likely operational requirements (and thus a deliverable energy generation project) and minimising visual effects.

- 6.2.43 In accordance with **paragraph 4.5.5 of NPS EN-1**, APL registered for a Design Review in October 2014 which was duly convened in December 2014 and attended also by a planning officer from CCS. The Consultation Report (Document Reference 5.1.0) sets out the feedback provided by DCfW.
- 6.2.44 The applicant will continue to liaise with the local authority, CCS, in agreeing detailed designs prior to construction such as on detailed matters as to planting and materials through the various requirements attached to the draft DCO (Document Reference 3.1) and in compliance with the Design Principles Statement (Document Reference 10.2).

Consideration of Combined Heat and Power

- 6.2.45 In accordance with **paragraph 4.6.6 of NPS EN-1**, the Applicant has given due consideration to the potential inclusion of CHP alongside other alternatives from the outset of the Project, as set out in Chapter 5 of the ES (Document Reference 6.1) and the Combined Heat and Power Technical Note (Document 6.2, Appendix 5.1).
- 6.2.46 A detailed site identification process was undertaken which considered a range of sites around England and Wales for gas fired power generation plants. Abergelli Farm was identified as appropriate in terms of where it connected to the grid, which is a key consideration.
- 6.2.47 To understand any heat demands in the area, an assessment of the DECC online heat map was carried out and this identified no appropriate heat off take opportunities proximate to the national gas and electrical networks in the locality, even if the chosen technology and operating mode (peaking) were capable of providing CHP.
- 6.2.48 As discussed in Chapter 5 of the ES (Document Reference 6.1), APL has undertaken a number of further studies in order to refine the technology choice and location for the Project. The outcome of these studies has determined that a simple OCGT is the most suitable technology choice for a peaking plant generating up to 299 MWe at the Project Site. This has been determined based on a number of environmental, economic and technical considerations. This peaking plant operating mode is too intermittent for a heat offtake, and the OCGT technology involves no steam cycle to form the offtake. Based on the information above, it can be concluded that there are prohibitive barriers to the application of CHP at the site:

- There is no existing regional heat market. From local searches, there are no suitable heat users of applicable scale available and none able to accept the unpredictable supply of heat available.
- The intermittent and peaking modes of operation of OCGT are incompatible with the likely continuous demands of heat users.
- No potential future heat requirements in the area have been identified and none are currently anticipated that would match the irregular operational pattern of a peaking plant.

6.2.49 It is therefore considered that due regard has been paid to relevant guidance as required by NPS EN-1, both past and current, and that the general requirement to provide for CHP should be set aside due to the particular operating mode of the proposed Power Generation Plant, which will serve a need recognised in NPS EN-1 for flexible gas generation.

Carbon Capture and Storage and Carbon Capture Readiness (CCR)

6.2.50 The Project would not meet or exceed the threshold of 300 MW and so is therefore not required to demonstrate Carbon Capture Readiness on the basis of **section 4.7 of NPS EN-1**.

Climate Change Adaptation

6.2.51 APL has undertaken detailed assessment work to consider the potential impacts of climate change for the Project, in accordance with **paragraphs 4.8.5, 4.8.7 and 4.8.9 of NPS EN-1**, as set out within the Flood Consequences Assessment (Document Reference 6.2; Appendix 9.1). A number of Project alternatives have been assessed by APL, taking into account a range of environmental factors, as set out with Chapter 5 of the ES (Document Reference 6.1). The ES (Document Reference 6.1) contains a number of technical chapters (including chapters relating to air quality, ecology, water quality and resources, and geology and ground conditions), referred to throughout this Planning Statement, which include consideration of the potential impacts of climate change and set out appropriate mitigation measures where necessary.

Grid Connection

6.2.52 As set out in the Consultation Report (Document Reference 5.1.0), in accordance with **paragraph 4.9.1 of NPS EN-1**, APL has consulted National Grid as part of the statutory consultation. Consultation responses were subsequently received from both National Grid plc and NGET in November 2014 and February 2018.

6.2.53 APL entered into a Connection Agreement with NGET on 23 February 2018 to connect the Generating Equipment to the NETS. The Connection Agreement provides for a connection in September 2022. As such it can be

confirmed that the principle of a connection that provides for the Generating Equipment to export its output to the NETS has been secured.

- 6.2.54 The responsibilities for designing and building the grid connection, and consenting the substation extension, are set out in Chapters 4 and 7 respectively of the Grid Connection Statement (Document Reference 9.1) and in the details of other consents and licences document (Document Reference 5.4).
- 6.2.55 Accordingly the requirements of NPS EN-1 are considered to be met.

Pollution Control and Other Environmental Regulatory Regimes

- 6.2.56 In accordance with **paragraph 4.10.1 of NPS EN-1**, Chapter 2 of the ES (Document Reference 6.1) sets out the overall regulatory framework that is relevant to the Application. APL acknowledges that some issues may be subject to separate regulatory regimes, and has prepared a Details of Other Consents and Licences document (Document Reference 5.4) which sets out details of the other consents and licenses required and when they will be applied for.
- 6.2.57 The requirement for additional consents and licences is also referenced and considered within Chapter 6 (Air Quality), Chapter 7 (Noise and Vibration) and Chapter 9 (Water Quality) of the ES and would be obtained at the relevant stages prior to, during or following the operation of the Project. The Applicant is in ongoing discussions with NRW regarding the Environmental Permit that will be required for the Project.

Safety / Hazardous Substances

- 6.2.58 In accordance with **paragraph 4.11.1 and 4.12.1 of NPS EN-1** and as documented in the Consultation Report (Document Reference 5.1.0) the Applicant consulted the HSE during statutory consultation. A response was received from HSE in November 2014 and February 2018.
- 6.2.59 The HSE has advised that the Project will be in close proximity to a number of Major Accident Hazard pipelines located mainly to the north of the Project Site, being the National Gas Transmission System which the Project seeks to connect into. HSE has advised the Applicant to consider the requirement for Hazardous Substances Consent if the Project is intending to store or use any of the Named Hazardous Substances or Categories of Substances and Preparations at or above the controlled quantities. APL envisages that only small quantities of potentially hazardous waste will be stored on the Generating Equipment Site at any time, and such substances will be held in secured containers to prevent contaminant migration. Additionally, the Project would not impinge on the separation distances required in respect of any explosives licensed sites in the vicinity of the Project Site.
- 6.2.60 It is therefore not anticipated that Hazardous Substances Consent will be required and accordingly the Details of Other Consents and Licences

document (Document Reference 5.4) does not identify this consent being required. In the unlikely event it proves to be required, an application would be made at the appropriate time.

Health

- 6.2.61 It is considered that, due to the nature of the Project, there is the potential for adverse effects on human health, primarily relating to exposure to excessive levels of noise and exposure to pollutants released during construction or operation of the Project.
- 6.2.62 As such, in accordance with **paragraph 4.13.2 of NPS EN-1**, the ES (Document Reference 6.1) assesses the impacts of the Project in respect of health and sets out appropriate measures to address these impacts as appropriate. Section 15.3) of the ES (Document Reference 6.1), summarises the likely effects of the Project on Public Health, as explained further in Chapters 6 (Air Quality), 9 (Ground Water Contamination), and 10 (Land Contamination) of the ES (Document Reference 6.1). The relevant topic chapters describe the risk assessment undertaken, the proposed mitigation measures and residual impacts of the Project.
- 6.2.63 With regard to EMFs, section 15.3 of the ES (Document Reference 6.1) explains that no significant effects would be expected due to the shielding to underground cables from their sheaths and the limited additional works above ground taking place in an existing high voltage substation with EMFs present and which the public do not access.
- 6.2.64 In relation to Air Quality, with the measures adopted in the Outline CEMP (Document Reference 6.2, Appendix 3.1, secured by a requirement in the draft DCO (Document Reference 3.1)) dust and particulate health risks should not arise, whilst due to the adequate dispersion provided by the stack, no significant effects on public health or ecological receptors are likely.
- 6.2.65 In relation to noise, noise surveys were undertaken at locations agreed with CCS and the Outline CEMP (Document Reference 6.2, Appendix 3.1) will minimise residual impacts during construction to non-significant levels, whilst during operation, silencer equipment will minimise residual impacts on the identified receptors to non-significant levels during operation.
- 6.2.66 With regard to pollution and contamination, groundwater and worker health impacts are not expected either during construction with the Outline CEMP (Document Reference 6.2, Appendix 3.1) implemented or during operation with the operational environmental management plan secured through the EP regarding spillages/washing of equipment.
- 6.2.67 Cumulative effects with other schemes in the area are similarly considered likely to be non-significant.

Common law nuisance and statutory nuisance

- 6.2.68 In accordance with **paragraph 4.14.2 of NPS EN-1**, possible sources of nuisance have been considered, with mitigation identified where relevant, in the Statement of Engagement of Section 79(1) of the Environmental Protection Act 1990 (EPA) (Document Reference 5.3). This document explains the condition of the Project Site, and findings as to potential air quality impacts, noise levels, artificial lighting and health effects generated by the Project during both construction and operation, and concludes that with the identified mitigation in place the construction and operation of the Project is unlikely to give rise to common law nuisance or statutory nuisance.
- 6.2.69 The statement concludes that, for all relevant potential sources of nuisance, the application of embedded mitigation measures, as identified in the report and which are secured in the draft DCO (Document Reference 3.1), will prevent impacts which are considered to have the potential to result in statutory nuisance under section 79(1) of the EPA 1990.
- 6.2.70 Accordingly it is considered that the Project is in accordance with relevant NPS policy relating to common law nuisance and statutory nuisance.

Security Considerations

- 6.2.71 In accordance with **paragraph 4.15.2 of NPS EN-1**, the Applicant has considered appropriate security measures associated with the Project. During construction these are governed by the Outline CEMP (Document 6.2, Appendix 3.1).
- 6.2.72 As explained in the ES (Document Reference 6.1), during construction of the Project, the perimeter of the Generating Equipment Site will be cleared of undergrowth and a permanent or temporary security fence placed with locked gates for main and emergency exits (capable of being opened in an emergency). Physical management of the Access Road will also be employed to ensure the security and safety of all staff.
- 6.2.73 Lighting columns will be erected around the perimeter of the Generating Equipment Site in order to provide security lighting and lighting for safe working in dark conditions. The lighting columns would be approximately 8 m in height and regularly spaced around the perimeter of the Generating Equipment Site. This is outlined in the Outline Lighting Strategy (Document Reference 6.2., Appendix 3.6).
- 6.2.74 No national security considerations have been identified in respect of the Project. Further, As documented in the Consultation Report (Document Reference 5.1.0) no statutory consultation responses were received raising relevant security concerns.
- 6.2.75 Accordingly, it is considered that the Project is in accordance with relevant NPS policy in this regard.

Air quality and emissions

- 6.2.76 In accordance with **paragraphs 5.2.1 and 5.2.7 of NPS EN-1**, an assessment of the likely impacts, in respect of air quality and emissions, has been undertaken in the EIA and findings are presented in the ES (Document Reference 6.1), which is submitted as part of the Application. The impacts of the Project in respect of air quality and emissions have been examined at the construction/demolition and operational phases, in compliance with the requirements of NPS EN-1.
- 6.2.77 Chapter 6 of the ES (Document Reference 6.1) provides an assessment of the impacts on air quality as a result of the Project.
- 6.2.78 During the construction / decommissioning of the Project, the main potential effect is dust generated from construction.
- 6.2.79 In order to mitigate potential impacts during the construction phase, an Outline CEMP has been prepared (Document Reference 6.2, Appendix 3.1). As part of the Outline CEMP (Document Reference 6.2, Appendix 3.1), embedded mitigation relating to air quality is to be implemented, including dust management measures. Full reference to mitigation measures may be found in the Outline CEMP (Document Reference 6.2, Appendix 3.1). With the mitigation measures implemented via the Outline CEMP (Document Reference 6.2, Appendix 3.1), the assessment concludes that no significant impacts are anticipated from the construction of the Project.
- 6.2.80 During operation, Chapter 6 of the ES (Document Reference 6.1) concludes the magnitude of the impacts on pollutant concentrations are considered to be negligible for all pollutant and averaging periods considered within the dispersion modelling. As such, impacts on air quality as a result of the Project are therefore not considered to be significant. No additional mitigation or monitoring is therefore proposed.
- 6.2.81 As set out above, and presented in the ES (Document Reference 6.1), following implementation of mitigation there is no expectation of any significant adverse impacts in respect of air quality and emissions. Accordingly, the proposals meet the aims and requirements of NPS EN-1, and thus the Project is considered acceptable in respect of air quality and emissions.

Biodiversity and geological conservation

- 6.2.82 In accordance with **paragraph 5.3.3 of NPS EN-1**, an assessment of the likely effects on internationally, nationally and locally designated sites of ecological or geological conservation importance, on protected species, and on habitats and other species of principal importance has been undertaken in the EIA, and the findings are presented in Chapters 8 (Biodiversity) and 10 (Geology and Ground Conditions) of the ES (Document Reference 6.1).

- 6.2.83 The impacts of the Project, in respect of biodiversity and geological conservation, have been considered at the construction, operation and decommissioning stage (set out below), in compliance with **section 5.3 of NPS EN-1**.
- 6.2.84 In accordance with **paragraph 5.3.18 of NPS EN-1**, a variety of measures would be used to avoid, minimise and mitigate impacts during construction, as set out in the Outline CEMP (Document Reference 6.2, Appendix 3.1) and Outline Landscape and Ecology Mitigation Strategy (Document Reference 6.2, Appendix 3.4).
- 6.2.85 In accordance with **paragraph 5.3.8 of NPS EN-1**, the areas of work are to be delineated carefully to minimise disturbance to local habitats and protected species. The Ancient Woodland, trees and habitats have been avoided as much as possible during the Project design development.
- 6.2.86 In accordance with **paragraph 5.3.4 of NPS EN-1**, an Outline Landscape and Ecology Mitigation Strategy (Document 6.2, Appendix 3.4) as secured by a requirement in the draft DCO (Document Reference 3.1) commits to, inter alia: replacement habitats and planting, comprising woodland/scrub, grassland (acid/marshy grassland mosaic), hedgerow and two wildlife ponds.
- 6.2.87 NPS EN-1 paragraph 5.3.14 requires that ancient woodland loss or deterioration is justified by reference to the benefits (including need) of that development in that location compared to the loss of the woodland habitat.
- 6.2.88 The Project has been designed to avoid Ancient Woodland as far as possible; however, construction of the Electrical Connection will lead to a permanent loss of a small proportion of Ancient Woodland habitat, which is considered to be a significant effect.
- 6.2.89 In accordance with **NPS EN-1 paragraph 5.3.14**, a justification for this loss in the terms required by the NPS is set out below, along with an explanation of how it has been minimised and would be compensated for.
- 6.2.90 The small loss of Ancient Woodland will be due to the Electrical Connection only and is considered unavoidable in the context of the Project. The alternative road access which was previously consulted on would have a number of significant adverse impacts on road users and require road/junction widening in various locations, and was the subject of concerns during consultation on the two access road options, as documented in the ES (Document Reference 6.1) and Consultation Report (Document Reference 5.1.0) respectively. APL undertook to realign the route of the new section of Access Road associated with Option B and Option B was modified to curve further south and avoid the area of Ancient Woodland. The location of the Generating Equipment Site and route of the Gas Pipeline have also been designed to avoid Ancient Woodland.
- 6.2.91 is considered that overall the chosen Access Road access offers several important benefits (being a much shorter overall route from the motorway

network both for construction and during operation for 25 years, requiring less construction due to its reuse of the existing National Grid access for much of its length, and more favoured during consultation from local occupiers and statutory consultees). It is further considered that local precedent and the substantial relevant mitigation is also relevant and important. The Substation and Felindre Gas Compressor Station adjacent involved the loss of ancient woodland and resulted in large new woodland planting areas that have contributed to the amenity and reinforced the landscape character of the area, and act to visually screen the nationally significant infrastructure that they surround.

- 6.2.92 Furthermore, the benefits of the Project as a whole in this location are considered to outweigh this small loss of restored ancient woodland. The Project is suitably located taking into account all relevant considerations as discussed in the ES (Document Reference 6.1), being a location that is viable, deliverable, minimises construction impacts to the national gas and electrical networks, is away from existing and proposed major population areas, has good access, and is in relatively low-lying topography and away from all other ecological designations and significant environmental constraints.
- 6.2.93 The Project represents a substantial and deliverable contribution to the overall urgent need for flexible generating stations as evidenced in NPS EN-1, the Gas Generation Strategy, the National Infrastructure Delivery Plan 2016-2021, and Energy Wales – A Low Carbon Transition 2014, and represents a significant scale of economic development at the national and local level in accordance with Planning Policy Wales and the CCS UDP and emerging LDP, which in line with **Paragraph 5.3.14** fall to be weighed against a small loss of restored ancient woodland.
- 6.2.94 In accordance with **NPS EN-1 paragraph 5.3.4**, it is considered that the Applicant has taken all reasonable opportunities to benefit ecological conservation interests, whilst remaining compatible with safe and practical operation of a power station and minimising impacts on the surrounding agricultural uses and landscape/vegetation pattern.
- 6.2.95 Accordingly it is considered that the requirements of NPS policy are met in this regard.

Civil and military aviation and defence interests

- 6.2.96 In accordance with S42 of the PA 2008, the Civil Aviation Authority (CAA) was consulted on the Project. Responses were received from the CAA in October 2014 and February 2018, whereby the CAA noted the relatively close proximity of Swansea Airport to the development site and recommended that consultation takes place with Swansea Airport and that any concerns expressed are taken into account. The Project falls outside of the defined safeguarding zones requiring statutory consultation with Swansea Airport. Notwithstanding this, upon the CAA's advice, Swansea Airport was supplied

with information about the Project as part of the consultation process and no reply was received.

- 6.2.97 NPS EN-1 states that the decision maker will wish to be satisfied that the effects on civil and military aviation and other defence assets have been addressed by the applicant. In this instance, and taking into account that the CAA and NATS raised no objections during statutory consultation (see Consultation Report Appendices (Document Reference 5.2; Appendix 9.1), the Project is not considered to have any conflicts or require mitigation.
- 6.2.98 Accordingly, the Project is considered to be acceptable in respect of civil and military aviation and defence interests in accordance with **section 5.4 of NPS EN-1**.

Dust, odour, artificial light, smoke, steam and insect infestation

- 6.2.99 In accordance with **paragraph 5.6.4 of NPS EN-1**, a full assessment has been undertaken of the potential emissions resulting from the construction, operation and decommissioning of the Project and is recorded in Chapter 6 of the ES (Document Reference 6.1), together with appropriate mitigation measures.
- 6.2.100 As set out within the Air Quality chapter of the ES (Document Reference 6.1) it is considered unlikely that there will be significant effects on air quality associated with the construction and decommissioning of the Project. The impacts relating to construction and decommissioning activities are all temporary. Furthermore, there are no significant impacts on air quality anticipated from the operation of the Project.
- 6.2.101 In accordance with **section 5.6 of NPS EN-1**, a number of measures would be implemented in order to mitigate the potential impact of dust and particulate matter emissions. During construction an Outline CEMP (Document Reference 6.2, Appendix 3.1) would be implemented. The Outline CEMP (Document Reference 6.2, Appendix 3.1) employs the use of Best Practicable Measures (BPM) to minimise the risk of adverse effects from construction dust and causing nuisance or damage to flora and fauna. The Outline CEMP (Document Reference 6.2, Appendix 3.1) also proposes the use of dust monitoring to ensure that dust generated by construction works does not exceed levels which could constitute a nuisance.
- 6.2.102 Odours, smoke, steam and insect infestation will not arise with the proposed technology choice. In respect of artificial light, the Outline CEMP (Document Reference 6.2, Appendix 3.1) provides a summary of artificial lighting required during the construction of the Project, and the measures employed to ensure that the adverse effects of artificial lighting are minimised during construction.
- 6.2.103 In accordance with **paragraph 5.6.4 of NPS EN-1**, and as explained in the Statement of Engagement of Section 79(1) of the Environmental Protection Act 1990 (Document Reference 5.3), the application of mitigation measures

will prevent any significant adverse impacts arising from the Project in respect of these potential issues. The Statement of Engagement of Section 79(1) of the Environmental Protection Act 1990 (Document Reference 5.3) has also been prepared – fulfilling regulation 5(2)(f) of the AFFP Regulations – to assess the condition of the site, potential air quality impacts, noise levels, artificial lighting and health effects generated by the Project throughout its various stages, concludes *“in all cases, the application of embedded mitigation measures will prevent impacts which are considered to have the potential to result in statutory nuisance under section 79(1) of the EPA 1990.”*

Flood risk

- 6.2.104 The Project Site is greater than 1 ha in area and therefore a Flood Consequences Assessment (Document Reference 6.2, Appendix 9.1) has been undertaken and is submitted as part of the Application, in accordance with **paragraph 5.7.4 of NPS EN-1**. The FCA identifies sources of potential flooding, the risk of flooding to the Project Site, the potential impacts of flooding to the Project and third parties, and identifies possible measures which could reduce flood consequences to acceptable levels. The FCA is prepared in accordance with TAN15: Development and Flood Risk.
- 6.2.105 The FCA classifies the proposed development as “highly vulnerable” to flooding in accordance with TAN15 classifications. However, the FCA has also found that, as the Project Site is in a rural location, minor changes in flood routes and flood levels in the immediate vicinity will not have any significant impacts on third parties. The Project is considered to have a low or negligible impact on flooding in the wider area.
- 6.2.106 The FCA has found that there are not likely to be any significant impacts resulting from the construction, operation and decommissioning of the Project with regards to flooding, in accordance with **paragraph 5.7.9 of NPS EN-1**. Accordingly, the Project meets the overall objectives of relevant planning policy and is considered acceptable in respect of flood risk.

Historic environment

- 6.2.107 A full assessment has been undertaken in the EIA of the potential impacts of the Project on the historic environment, and the findings are presented in Chapter 13 of the ES (Document Reference 6.1), in accordance with **paragraphs 5.8.1 and 5.8.8 of NPS EN-1**.
- 6.2.108 The potential for unknown archaeological remains is considered to be low across the Project Site, however a large portion of the fields that lie within the footprint of the Generating Equipment Site have not been subject to significant ground disturbance.
- 6.2.109 A requirement has been included in the draft DCO (Document Reference 3.1) which will require a written scheme of investigation to be prior approved by CCS and then to be carried out, in accordance with **section 5.8 of NPS EN-1**.

6.2.110 As set out above and explained in the ES (Document Reference 6.1), it is anticipated that, as no significant impacts on archaeology or cultural heritage are expected as a result of the Project, the Project meets the aims and requirements of relevant planning policy and is considered acceptable in respect of the impact on the historic environment.

Landscape and visual

6.2.111 An assessment of the likely landscape and visual impacts of the Project has been undertaken and the findings are presented in Chapter 11 of the ES (Document Reference 6.1), in accordance with **paragraphs 5.9.1, 5.9.5 and 5.9.7 of NPS EN-1**.

6.2.112 During the construction of the Project, some potential temporary landscape and visual effects will arise from construction activities. Where necessary, these will be managed via strategies set out in the Outline CEMP (Document 6.2, Appendix 3.1).

6.2.113 The construction period is of a limited duration (approximately 22 months), and therefore significant mitigation to limit landscape and visual impacts is not anticipated. Nonetheless, section 3.11 of the ES (Document Reference 6.1) outlines the mitigation measures which will be implemented during the construction phase in order to specifically limit impacts on landscape and visual amenity in the surrounding area. These measures include the following:

- The use of tall hoardings to screen views of ground level construction activities in relation to sensitive;
- Materials and machinery will be stored tidily during the construction works;
- Lighting of compounds and work sites will be restricted to agreed working hours and those which are necessary for security;
- Unnecessary removal of vegetation will be avoided;
- Retention and protection of existing trees;
- Public roads providing access to construction site will be maintained free of dust and mud;
- The Contractor will clear and clean all working areas and accesses as work proceeds and when no longer required for the works;
- On completion of construction works, all structures, equipment, surplus materials, waste, notice boards and temporary fences used during construction will be removed from the Project Site with minimum damage to the surrounding area; and

- Prompt reinstatement of areas that are no longer required following construction.

- 6.2.114 During the operation of the Power Generation Plant, the main visual impact is associated with the stack. Of the 19 representative viewpoints assessed, 5 of the viewpoints would experience significant effects once the Project is operational. However, much of the Project Site itself will be screened by existing vegetation and local topography and this will reduce the visual effects. This will be strengthened with planting as part of the Outline Landscape and Ecology Mitigation Strategy (Document Reference 6.2, Appendix 3.4). Structures on the Project Site have also been designed to reduce glare and to assimilate the Project into the surrounding landscape as much as possible. It is also notable that OCGT allows a significant reduction in stack height compared to other technology types.
- 6.2.115 During operation, landscape mitigation measures will be implemented through a requirement in the draft DCO (Document Reference 3.1) for implementation to be in substantial compliance with the outline Landscape and Ecology Mitigation Strategy (Document Reference 6.2, Appendix 3.4) and Outline Landscape and Ecology Mitigation Plan (Document Reference 6.3, Figure 3.6).
- 6.2.116 Accordingly, it is considered that the design of the Project has been subject to detailed consideration and assessment in order to minimise the landscape impacts and visual intrusion wherever feasible. The Project meets the aims and requirements of relevant planning policy, and no important and relevant considerations arise to the contrary, thus the Project is considered acceptable in respect of landscape and visual amenity.

Land use including open space, green infrastructure and Green Belt

- 6.2.117 The Project has sought to locate away from homes and strategic employment and housing proposals in the UDP and emerging LDP, in accordance with **section 5.10 of NPS EN-1**, in particular, to locate away from Policy EC1 which allocates 190 ha of employment land at Felindre Strategic Business Park, located approximately 1.5 km to the south-west of the Project Site, in order to meet the growth needs of the local economy.
- 6.2.118 The Consultation Report (Document Reference 5.1.0) describes the views of the community, including local businesses, during the various consultation exercises undertaken in respect of the Project and location of the Project Site.
- 6.2.119 As stated in the ES (Document Reference 6.1), the agricultural land classification for the land within and surrounding the Project Site is grade 4 (poor quality agricultural land). Therefore, the Project Site is considered to be suitably sited so as to minimise impacts on high quality, versatile agricultural land in accordance with **paragraph 5.10.8 of NPS EN-1**.
- 6.2.120 The Project Site is predominantly agricultural land, used for keeping horses and sheep with associated farm buildings and residential properties. There

will be no deleterious effect upon the farm's viability from the construction of the Project due to the relatively low grade of land it represents (Grade 4, suitable for grazing); and the siting and setting out of the Project that will allow activities to continue elsewhere on the farmholding.

- 6.2.121 APL has sought to adopt good design principles as part of the Project, including its layout, in accordance with **paragraph 5.10.19 of NPS EN-1**. As set out in the Design Principles Statement (Document Reference 10.2), the form, scale, massing and landscaping has been designed so that the Power Generation Plant integrates with its surroundings, minimising visual intrusion from key viewpoints, and minimises its impacts on nearby land uses such as housing, energy developments, and agriculture, through siting and layout.
- 6.2.122 The Project should also be considered against the relevant UDP and emerging LDP policies applying to the land it covers. An assessment of compliance with these policies is provided at section 6.4 of this Planning Statement.

Noise and vibration

- 6.2.123 An assessment of the likely noise and vibration impacts associated with the Project has been undertaken in the EIA and the findings are presented in Chapter 7 of the ES (Document Reference 6.1), in accordance with **paragraphs 5.11.1 and 5.11.4 of NPS EN-1**. A Statement of Engagement of Section 79(1) of the Environmental Protection Act 1990 (Document Reference 5.3) has also been prepared – fulfilling regulation 5(2)(f) of the AFFP Regulations – to assess the existing conditions of the Project Site, potential air quality impacts, noise and vibration and artificial lighting generated by the Project. The noise and vibration effects have been considered at the construction, operation and decommissioning stage, in accordance with the requirements of **section 5.11 of NPS EN-1**.
- 6.2.124 During the construction of the Project, noise will be emitted by construction activities for the Generation Equipment Site and Access Road. Noise will also be emitted by construction traffic; however this will represent a temporary, intermittent noise increase, and will vary as day-to-day progress is made. In order to minimise the effects during construction, an Outline CEMP (Document Reference 6.2, Appendix 3.1) will be implemented. Section 6.2 of the Outline CEMP (Document Reference 6.2, Appendix 3.1) outlines the potential sources of nuisance noise created by construction works, and the methods of mitigation proposed to limit these impacts. Accordingly, the noise and vibration effects of the Project are considered to have been minimised as far as is reasonable and are acceptable.
- 6.2.125 During operation of the Power Generation Plant, the assessment for the daytime period shows that the magnitude of operational noise impact is predicted to be minor adverse and therefore not significant.
- 6.2.126 In accordance with **paragraph 5.11.12 of NPS EN-1**, the Project Site layout design has been considered in detail to ensure that the noise and vibration

impacts of the Project during the construction, operation and decommissioning phases are mitigated as far as possible.

- 6.2.127 With regard to noise and vibration, the Project meets the aims and requirements of relevant planning policy, and no important and relevant considerations arise to the contrary, thus the Project is considered acceptable in respect of noise and vibration.

Socio-economic

- 6.2.128 A socio-economic assessment has been undertaken as part of the EIA and is set out within Chapter 14 of the ES (Document Reference 6.1), in accordance with **paragraph 5.12.1 of NPS EN-1**. The socio-economic assessment identifies the likely significance of effects on the local, regional and national economy from the Project including the construction, operation and decommissioning of the Project. The assessment shows that socio-economic benefits will be provided by the Project through the creation of local and national jobs and workers spending in the local economy.
- 6.2.129 In terms of construction labour impacts, with a construction period estimated to last approximately 22 months from early 2020 to 2022, and taking into account the type of work likely at this site, the number of construction workers onsite per month is estimated to range from 25 to 122 during the peak construction period.
- 6.2.130 The annual construction GVA per head in Wales is £76,725, therefore the construction phase is likely to deliver £7.1 million GVA to the wider economy annually, benefitting the local and Wales economy. Taking into account numbers and types of workers, the construction work generated could be readily absorbed by the local labour market.
- 6.2.131 Local accommodation availability has been assessed and 100% of workers would be able to be accommodated nearby, benefitting hotel and related businesses.
- 6.2.132 In terms of ongoing labour impacts, the assessment has found that the operational phase of the Project would provide an estimated 10 FTE direct jobs. The net effect, taking account of the leakage, displacement and multiplier effects shown above would be 6 additional regional FTE jobs and 5.5 national FTE jobs. Based on an average GVA per utility employee in Wales of £91,053, the Project's operation would provide approximately £0.55m GVA and £0.5m GVA per annum to the local and national economy respectively.
- 6.2.133 Whilst skilled, specialist permanent roles would be needed, the labour market locally is likely to be capable of absorbing the requirement: the operational workforce requirement accounts for less than 2% of the local electricity and gas labour force and less than 1% of the working age, economically active and highly skilled, skilled and unskilled labour force.

- 6.2.134 Decommissioning impacts are not expected to exceed those of the construction phase. Decommissioning will be governed by a strategy for the prior approval of CCS pursuant to a requirement in the draft DCO (Document Reference 3.1).
- 6.2.135 The baseline situation in respect of tourist attractions and facilities has been studied, with a 10 km radius study area defined (Document Reference 6.1, Figure 14.2). It has been found that there are a limited number of tourist attractions within the tourism study area. Most of the tourist attractions in the wider area are located in the city of Swansea.
- 6.2.136 A tourism business survey was undertaken (as recorded in the ES (Document Reference 6.1) where the majority of respondents stated that they expected that the Project would have no impact on their business. Some businesses felt that they would benefit at the construction phase through related demand for accommodation, food and drink, and other services.
- 6.2.137 As set out above, the Project is likely to have a slightly beneficial effect on the local and Wales economy, with benefits during construction in particular but also during operation, and minimal and localised effects on the small number of tourism related businesses in the locality and none in the wider area. The Project therefore is considered to comply with the relevant NPS and all other relevant and important considerations.

Traffic, transport and access

- 6.2.138 In accordance with **section 5.13 of NPS EN-1**, a Transport Assessment has been carried out within Chapter 12 of the ES (Document Reference 6.1) considering traffic flow, delay, highway safety and other relevant matters.
- 6.2.139 Footpaths LC34 and LC117 cross the Access Road and Footpath LC35B passes through the northern part of the Project Site. Where possible, connectivity will be maintained by the use of temporary diversions and working methods to allow the PROWs to remain open for the majority of the construction period. The proposed management of the PROW is set out in the Outline CTMP (Document Reference 6.2, Appendix 3.3) and will be developed further in consultation with the PROW Officer at CCS.
- 6.2.140 The Outline CTMP (Document Reference 6.2, Appendix 3.3) provides a framework for addressing the transport issues associated with the movement of construction traffic to serve the construction of the Project, including site access, routing, signage, HGV and abnormal loads, and operational matters. Its purpose is to set out the principles that the developer will follow to manage construction traffic during the construction of the Project. This will be secured via a DCO requirement (see Document Reference 3.1). With this mitigation in place, the assessment has identified that at worst the Project will have a moderate adverse effect, restricted to temporary effects at the three PROWs.
- 6.2.141 An Outline Construction Staff Travel Plan (Document Reference 6.2, Appendix 3.3) has been prepared in accordance with **paragraph 5.13.4 of**

NPS EN-1. The aim of a Travel Plan is to provide workers with sustainable travel choices to get to and from a place of work, and where possible, seek to reduce single occupancy vehicle use. Use of the Travel Plan will be secured via a DCO requirement.

- 6.2.142 The traffic generation of the Project during the operational phase is expected to be minimal, comprising approximately 30 movements per day (two movements per staff member for a shift pattern of up to 15 permanent staff). The significance of the effect is anticipated to be negligible.
- 6.2.143 In summary, the traffic and transport effects of the Project assessed are anticipated to be negligible or minor adverse, with the exception of moderate effects which are therefore significant upon PROW during construction. However, these effects are temporary and will be minimised through implementation of the Outline CTMP (Document Reference 6.2, Appendix 3.3). Accordingly, the Project is considered to meet the aims and requirements of relevant NPS policy and thus the Project is considered acceptable in respect of traffic and transport.

Waste Management

- 6.2.144 In accordance with **paragraphs 5.14.1 and 5.14.6 of NPS EN-1**, wherever practicably possible waste will be avoided; however, where necessary, waste will be managed in accordance with the waste hierarchy. As set out in Chapter 15 of the ES (Document Reference 6.1), the outline CEMP (Document Reference 6.2, Appendix 3.1) will seek to apply the waste hierarchy – consisting of (in order of preference): prevention; re-use; recycling; other recovery (e.g. energy recovery); and disposal – during all phases of the Project as part of their waste prevention and management policy. Measures will include, amongst others, the appropriate storage of excavated spoil and testing for Waste Acceptance Criteria to determine whether it can be re-used on or off-site (see Chapter 15 of the ES (Document Reference 6.1)).
- 6.2.145 A small amount of both hazardous and non-hazardous waste is expected to arise from the Power Generation Plant during operation. Final types and volumes have not yet been confirmed but will be restricted to the following: general office wastes; used gas turbine air intake filters; small quantities of water from compressor blade washing; separated oil/sludge from any oil/water separators on site, and use oil, chemicals or chemical containers; and other miscellaneous wastes. Only small quantities of potentially hazardous waste are to be stored on the Generating Equipment Site and waste will be held in secure containers to prevent contamination migration.
- 6.2.146 During decommissioning, a number of waste types are likely to arise, all of which will be suitable for recovery, reuse or recycling. It is not predicted that significant quantities of residual waste requiring disposal will arise. There is good provision of waste management capacity in South West Wales to cover all types of waste arising. All waste generation during the operational phase will be handled and stored under appropriate waste management legislation.

6.2.147 As explained in Chapter 15 of the ES (Document Reference 6.1), taking into account potential mitigation measures, there are not predicted to be likely significant effects on waste management and public health as a result of the Project. Accordingly, the Project meets the aims and requirements of relevant planning policy, and no important or relevant considerations arise to the contrary, and thus the Project is considered acceptable in respect of waste management.

Water Quality and Resources

6.2.148 An assessment of the impact of the Project on the existing water quality and resources has been considered at the construction, operation and decommissioning stage (set out below), in compliance with the requirements of **section 5.15 of NPS EN-1**.

6.2.149 During construction, the Water Quality and Resources assessment (Document Reference 6.1, Chapter 9) considers the principal impacts of the works with respect to water quality and resources comprising the following:

- Pollution impacts on surface watercourses and groundwater associated with:
 - increased sediment loads in site runoff containing elevated suspended sediment levels disturbed during site clearance;
 - the release of hydrocarbons and oils due to a large number of vehicles accessing the site, leakages from temporary oil/fuel storage tanks and accidental spillages; and
 - accidental leaks of hazardous materials, such as concrete and cement products, which can be contained in uncontrolled wash-down water and surface water runoff;
 - dewatering of excavations and the discharge of potentially polluted/high sediment loading water to the water receptors; and
 - pollution from dust and debris.

6.2.150 The potential impacts for the Project are very similar to those for the Power Generation Plant, which is considered to have the most significant impacts on the water environment.

6.2.151 During operation of the Power Generation Plant, the key risks to the water environment include:

- Pollution from oil (lubrication etc.) and fuels leakage from storage facilities or resulting from accidental spillages during delivery which may be carried by surface water runoff discharging to the water

environment through the proposed surface water drainage system;
and

- Water quality impacts associated with treated wastewater discharges.

6.2.152 In accordance with **paragraphs 5.15.9 and 5.15.10 of NPS EN-1**, the design of the Power Generation Plant has been subject to detailed consideration and assessment in order to minimise the impact on water quality and resources, as explained in Chapter 9 of the ES (Document Reference 6.1) and secured by the implementation of the Outline CEMP (Document Reference 6.2, Appendix 3.1) and Outline Surface Water Management Plan (Document Reference 6.2, Appendix 3.2).

6.2.153 During operation, as set out in Chapter 9 of the ES (Document Reference 6.1), NRW will control the quality of water that is discharged from the Project Site under the Environmental Permit. Any surface water contaminated by hydrocarbons will be passed through interceptors prior to discharge. Operational site drainage will be appropriately designed to meet the needs of the Project.

6.2.154 Chapter 3 of the ES (Document Reference 6.1) sets out that, during construction, a series of embedded design mitigation measures will be implemented in respect of water resources. Following the implementation of embedded mitigation measures, it is concluded in Chapter 9 of the ES (Document Reference 6.1) that impacts associated with the construction, operation and decommissioning phases are not significant.

National Policy Statement for Fossil Fuel Electricity Generating Infrastructure (EN-2)

6.2.155 NPS EN-2 is the relevant technology specific NPS for the Application.

6.2.156 Part 2 of NPS EN-2 provides additional guidance to Part 4 and Part 5 of EN-1 regarding the assessment of impacts specifically associated with fossil fuel generating stations. With reference to section 5.2 of this Planning Statement, this section provides an assessment of the Project in respect of 2 of NPS EN-2 as set out in Table 6-2.

Table 6-2 NPS EN-2 Assessment

		Planning Statement Reference	
NPS EN-2 Section	Issue	Policy Requirement	Assessment
2.2	Factors influencing site selection by developers	5.2.47 – 5.2.48	6.2.157 – 6.2.160

2.3	Government policy criteria for fossil fuel generating stations	5.2.49 – 5.2.51	6.2.161 – 6.2.165
2.4	Impacts of fossil fuel generating stations	5.2.52	6.2.166
2.5	Air quality and emissions	5.2.53	6.2.167 – 6.2.170
2.6	Landscape and visual	5.2.54	6.2.171 – 6.2.176
2.7	Noise and vibration	5.2.55	6.2.177 – 6.2.180
2.10	Water quality and resources	5.2.56	6.2.181 – 6.2.185

Factors influencing site selection by developers

6.2.157 In deciding upon the location of the Project Site, the Applicant undertook a detailed feasibility assessment having regard to a number of technical, environmental, and economic factors in accordance with **paragraphs 2.2.1 and 2.2.2 of NPS EN-2**. As part of a detailed feasibility assessment, the Applicant looked at a range of sites around the UK to support power generation plants of this nature. This search for potential power generation plant sites across the UK was focused on areas that were capable of meeting the Applicant’s strategic project development criteria:

- Acceptable proximity to the national gas transmission system & the national electricity transmission system or local distribution networks;
- Located within areas that are net importers of electricity; and
- Located within areas of compatible land use designation/s.

6.2.158 In terms of technical constraints, the size of the site (i.e. large enough to support a power generation plant of up to 299 MW and integral infrastructure) and the proximity of a site to appropriate gas and electrical connection points were both key considerations, in line with NPS EN-2.

6.2.159 From an environmental perspective, the site must have due regard to close sensitive receptors such as residential properties or sites of ecological importance (to avoid unacceptable impacts from noise and visual disturbance), the current nature of the surrounding area (to limit impacts on the landscape character of the area), previous site uses and land quality (to avoid sterilisation of the best and most versatile agricultural land or mineral assets) and proximity to sensitive ecological habitats.

6.2.160 Based on these factors, the Project Site was considered suitable for the following reasons:

- It is in close proximity to a suitable electrical connection point;
- It is in close proximity to a suitable gas connection point;
- The Project Site does not include any nationally important environmental designations;
- The land available is of an adequate size to accommodate the Power Generation Plant, Gas Connection and Electrical Connection;
- The Project Site is largely situated on poor quality agricultural land (improved grassland classified as Grade 4 agricultural land);
- It is in close proximity to similar industrial developments including the Felindre Gas Compressor Station and Swansea North Substation;
- The surrounding network is within an area of net electricity import; and
- It is in close proximity to a well-developed road network to the Project Site.

Government policy criteria for fossil fuel generating stations

- 6.2.161 In accordance with the requirements of **section 2.3 of NPS EN-2**, APL has considered government policy criteria relating to CHP, CCR, Carbon Capture and Storage and climate change adaptation, as summarised below and explained throughout this Planning Statement and the ES (Document Reference 6.1).
- 6.2.162 Principally, CCR/Carbon Capture and Storage is not applicable to the Project as the Project would not meet or exceed the threshold of 300 MW set out in **section 4.7 of NPS EN-1**.
- 6.2.163 In relation to CHP, the CHP Technical Note (Document Reference 6.2, Appendix 5.1) explains the consideration given to CHP as sought by NPS policy. It has been concluded that there are prohibitive barriers to the application of CHP at the site, as there is no existing regional heat market and the peaking modes of operation of OCGT are incompatible with the likely continuous demands of heat users.
- 6.2.164 APL has undertaken detailed assessment work to consider the potential impacts of climate change for the Project, in accordance with **paragraph 2.3.13 of NPS EN-2**. The ES (Document Reference 6.1) contains a number of technical chapters (including chapters relating to air quality, ecology, water quality and resources, and geology and ground conditions), referred to throughout this Planning Statement, which include consideration of the potential impacts of climate change and set out appropriate mitigation measures where necessary.

6.2.165 In accordance with **paragraph 2.3.16 of NPS EN-2**, APL has sought to adopt good design principles as part of the Project and in respect of landscape and visual amenity as explained within the Design Principles Statement (Document Reference 10.2). The form, scale, massing and landscaping has been designed so that the Power Generation Plant blends in with its surroundings minimising visual intrusion from key viewpoints.

Impacts of fossil fuel generating stations

6.2.166 In accordance with the provisions of **section 2.4 of NPS EN-2**, an assessment of the likely impacts of the Project in respect of air quality, emissions, landscape and visual impacts, and water quality and resources has been undertaken as part of the EIA and the findings, including appropriate mitigation measures, are presented in Chapters 6, 9 and 11 of the ES (Document Reference 6.1).

Air quality and emissions

6.2.167 An assessment of the likely impacts in respect of air quality and emissions has been undertaken in the EIA and the findings are presented in Chapter 6 of the ES (Document Reference 6.1), in accordance with **paragraph 2.5.2 of NPS EN-2**.

6.2.168 During the construction and decommissioning stages of the Project, the main potential effect is dust generated from construction. Accordingly, in order to mitigate potential impacts during the construction phase, an Outline CEMP (Document Reference 6.2, Appendix 3.1) has been prepared. As part of the Outline CEMP (Document Reference 6.2, Appendix 3.1), mitigation relating to air quality is to be implemented, including dust management measures. With the mitigation measures implemented via the Outline CEMP (Document Reference 6.2, Appendix 3.1), the assessment concludes that no significant impacts are anticipated from the construction of the Project.

6.2.169 Chapter 6 of the ES (Document Reference 6.1) concludes that, during operation, the magnitude of the impacts in respect of pollutant concentrations are considered to be negligible for all pollutant and averaging periods considered within the dispersion modelling. As such, impacts on air quality as a result of the Project are therefore not considered to be significant. No additional mitigation or monitoring is therefore proposed.

6.2.170 The Project therefore accords with **section 2.5 of NPS EN-2**, and thus the Project is considered acceptable in respect of air quality and emissions.

Landscape and visual

6.2.171 An assessment of the likely landscape and visual impact associated with the proposed development has been undertaken in the EIA and the findings are presented in Chapter 11 of the ES (Document Number 6.1.0), in accordance with **paragraph 2.6.2 of NPS EN-2**.

- 6.2.172 The impact on visual amenity has been minimised, in accordance with **paragraphs 2.6.5 and 2.6.10 of NPS EN-2**, through appropriate assessment in the Landscape and Visual Impact Assessment (Document Reference 10.1, Chapter 11) and identification of suitable mitigation, which is secured in the Design Principles Statement (Document Reference 10.2) and the Outline Landscape and Ecology Mitigation Strategy (Document Reference 6.2, Appendix 3.4), secured by requirements in the draft DCO (Document Reference 3.1). These provide for planting to screen built structures within the Project Site and suitable finishing to larger plant items.
- 6.2.173 The location of the Project and its layout have been explained in the ES (Document Reference 6.1) with reference to visual impact and all other relevant considerations and represent extensive efforts to integrate the Project into the local and wider landscape through measures such as: the selection of OCGT technology with substantially lower stack heights than other technologies, the alignment of the larger plant items to minimise massing in long views, the location in lower topography in the local context, and the retention of existing field boundaries around the Generating Equipment Site and Laydown Area.
- 6.2.174 It is noted that the Design Commission for Wales stated in their Design Review report in 2014 (see Consultation Report (Document Reference 5.1.0) in respect of the Project Site location as follows:
- 6.2.175 *“There is a clear logic behind the selection of this site for the intended project, in terms of existing energy infrastructure and demand. The Design Commission supports this well considered and well justified scheme, and believes that the design processes that the team are undertaking are guiding the project in the right direction. A clear case was made for the need for the facility, and it is good to see a new economic use of the farmland.”*
- 6.2.176 These design processes have continued since the Design Review, as documented in the Consultation Report (Document Reference 5.1.0) and recorded in the Design Principles Statement (Document Reference 10.2) secured by requirements of the draft DCO (Document Reference 3.1). It is considered that visual impacts have been minimised as far as reasonably practicable and that the Project represents “*Good Design*” and a suitable location, in accordance with **paragraph 2.6.5 of NPS EN-2**.

Noise and vibration

- 6.2.177 An assessment of the likely noise and vibration impacts associated with the Project has been undertaken in the EIA and the findings are presented in Chapter 7 of the ES (Document Reference 6.1), in accordance with **paragraph 2.7.1 of NPS EN-2**.
- 6.2.178 In accordance with **paragraph 2.7.5 of NPS EN-2**, the siting has been selected to avoid major population areas both existing and proposed (such as UDP designation EC1, Felindre Business Park) in order to minimise impacts on amenity. The design will also minimise noise and vibration

impacts, as set out further within the Design Principles Statement (Document Reference 10.2), by including silencer equipment in the exhaust stack and housing gas turbine generators and major compressors in acoustic enclosures.

6.2.179 Construction noise mitigation measures are included in the Outline CEMP (Document Reference 6.2, Appendix 3.1) and include measures to minimise impacts at local residential noise sensitive receptors.

6.2.180 With the above mitigation incorporated the residual effects are predicted to be non-significant and in accordance with **section 2.7 of NPS EN-2**, thus the Project is considered acceptable in respect of noise and vibration.

Water quality and resources

6.2.181 An assessment of the likely effects on water quality and resources associated with the proposed development has been undertaken in the EIA and the findings are presented in Chapter 9 of the ES (Document Reference 6.1), in accordance with **paragraphs 2.10.1 and 2.10.2 of NPS EN-2**.

6.2.182 In accordance with **section 2.10 of NPS EN-2**, a number of measures will be implemented to minimise the impacts of the Project on water quality and resources:

- Hydrological protection measures to prevent pollution events, including silt traps and/or sedimats, suitable phasing and avoidance of stockpiled materials;
- Appropriately designed oil retaining areas;
- Adaptation of different platform levels;
- Provision for all process to be collected in a drain tank removed by road tanker and disposed by an accredited company to a designated treatment facility off-site;
- Rainwater to be removed from oil retaining areas by an automatic pump to the oily water drainage system;
- The oily water drainage system will ultimately pass through an appropriately designed oil separator before discharging into surface water bodies or drainage systems; and
- Oil unloading areas on site designed to include containment for accidental spillage of fuel.

6.2.183 Furthermore, it will be necessary to divert some of the watercourses and ditches crossing the site which will lead to some loss of habitat in the short term, and potentially permanent loss or detriment to existing habitats where culverts are unavoidable. The Project will mostly affect waterbodies within

and in close proximity to the Project Site. Significant impacts are not expected on water sensitive receptors in the wider area.

- 6.2.184 The Outline CEMP (Document Reference 6.2, Appendix 3.1) and Surface Water Management Plan (Document Reference 6.2, Appendix 3.2) provide mitigation measures in regards to likely impacts of construction on Contaminated Land and Groundwater and Surface Water. In order to ensure that there will be no discharges to any surface watercourses as a result of construction activities at the Project Site and also to control flood risk, construction on site will follow the measures set out in the Outline CEMP (Document Reference 6.2, Appendix 3.1).
- 6.2.185 Following the implementation of the embedded mitigation measures and measures included in the Outline CEMP (Document Reference 6.2, Appendix 3.1), it is concluded that water quality and resources impacts associated with the construction, operation and decommissioning phases are not significant and the Project is in accordance with **section 2.10 of NPS EN-2**.

National Policy Statement for Gas Supply Infrastructure and Gas and Oil Pipelines (EN-4)

- 6.2.186 As noted above, the Application does not seek development consent for the Gas Connection. However, APL is seeking powers of compulsory acquisition for the land rights required for the Gas Connection as part of the application. Accordingly, the relevant provisions of NPS EN-4 are considered below.
- 6.2.187 In accordance with the provisions of **sections 2.20 – 2.23 of NPS EN-4**, an assessment of the likely impacts in respect of noise and vibration, biodiversity, landscape and visual impacts, water quality and resources, and ground conditions, has been undertaken as part of the EIA and the findings are presented in chapters 7 – 11 of the ES (Document Reference 6.1).
- 6.2.188 As required under the EIA regulations and acknowledged in **NPS EN-4** as well as NPS EN-1, the ES (Document Reference: 6.1) provides an account of the consideration of the main alternatives studied by APL, including alternative routes for the Gas Connection. Paragraphs 6.2.29 – 6.2.32 of this Planning Statement provide an explanation of the consideration of alternative routes for the Gas Connection.

National Policy Statement for Electricity Networks Infrastructure (EN-5)

- 6.2.189 As noted above, the Application does not seek development consent for the Electrical Connection. However, APL is seeking powers of compulsory acquisition for the land rights required for the Electrical Connection as part of the application. Accordingly, the relevant provisions of NPS EN-5 are considered below.
- 6.2.190 In accordance with **paragraph 2.4.1 of NPS EN-5**, APL has undertaken detailed assessment work to consider the potential impacts of climate change

on the Electrical Connection, as explained within the ES (Document Reference 6.1).

- 6.2.191 In accordance with the provisions of **section 2.5 of NPS EN-5**, an assessment of the likely environmental impacts of the Electrical Connection has been undertaken as part of the EIA and the findings are presented in the ES (Document Reference 6.1). APL has sought to adopt good design as explained in the Design Principles Statement (Document Reference 10.2) as required by paragraph 2.5.2 of NPS EN-5.
- 6.2.192 As required under the EIA regulations and acknowledged in NPS EN-5 as well as NPS EN-1, the ES (Document Reference: 6.1) provides an account of the consideration of the main alternatives studied by APL, including alternative solutions for the Electrical Connection. Paragraphs 6.2.33 – 6.2.35 of this Planning Statement provide an explanation of the consideration of alternative solutions for the Electrical Connection.
- 6.2.193 In accordance with the provisions of **paragraph 2.10.1 and 2.10.15 of NPS EN-5**, APL has undertaken an EMF assessment (see Document Reference 6.2, Appendix 15.1). The EMF assessment concludes that the general public will not be exposed to any increase in EMFs from the Electrical Connection and there will be no significant effects arising from EMFs.

6.3 Welsh Planning Policy

Planning Policy Wales (Edition 9, November 2016) (PPW) and associated Technical Advice Notes (TAN)

- 6.3.1 PPW sets out the land use planning policies of the Welsh Government and is supplemented by 24 topic-based TANs, as explained at section 5.3 of this Planning Statement.
- 6.3.2 With reference to section 5.3 of this Planning Statement, this section provides an assessment of the Project in respect of PPW: Edition 9 and associated TANs as set out in Table 6-3.

Table 6-3 PPW and TANs Assessment

		Planning Statement Reference	
PPW Reference (with associated TANs)	Issue	Policy Requirement	Assessment
Chapter 4	Planning for Sustainability	5.3.3 – 5.3.9	6.3.3
Chapter 5	Conserving and Improving Natural Heritage and the Coast	5.3.10 – 5.3.12	6.3.4

		Planning Statement Reference	
PPW Reference (with associated TANs)	Issue	Policy Requirement	Assessment
Chapter 7	Economic Development	5.3.13 – 5.3.14	6.3.5
Chapter 12	Infrastructure and Services	5.3.15 – 5.3.17	6.3.6
Chapter 13	Minimising and Managing Environmental Risks and Pollution	5.3.18 – 5.3.20	6.3.7
Chapter 14	Minerals	5.3.21 – 5.3.25	6.3.8 – 6.3.9
TAN 20 / TAN 21	Planning and the Welsh Language / Waste	5.3.26 – 5.3.27	6.3.10 – 6.3.11

PPW Chapter 4 (and associated TANs)

- 6.3.3 The Project provides low carbon energy generation and a number of employment opportunities, whilst demonstrating high-quality design and mitigating potential environmental impacts, as explained within the Design Principles Statement (Document Reference 10.2) and Environmental Statement (Document Reference 6.1). The Project therefore accords with the provisions of **PPW Chapter 4** regarding sustainable development.

PPW Chapter 5 (and associated TANs)

- 6.3.4 The Project seeks to avoid significant harm to biodiversity and geological conservation interests in accordance with the provisions of **PPW Chapter 5**. Several measures have been implemented to limit significant adverse effects including the provision of replacement habitats, provision of wildlife ponds and replacement planting. Notwithstanding this, the Project will result in the loss of a small proportion of Ancient Woodland and broadleaved semi-natural woodland, as explained at Chapter 8 of the ES (Document Reference 6.1). However, the impacts of this are considered to be acceptable when weighed against the need and benefits of the Project.

PPW Chapter 7 (and associated TANs)

- 6.3.5 The Project is consistent in principle with **PPW Chapter 7** as the Project provides positive economic benefits, as explained in Chapter 14 of the ES (Document Reference 6.1). Furthermore, the Project Site is well suited for its proposed use as set out the ES (Document Reference 6.1, Chapter 5) and this Planning Statement. Therefore, the Project is considered to accord with the aims of **PPW Chapter 7**.

PPW Chapter 12 (and associated TANs)

- 6.3.6 As explained in Chapter 4 of this Planning Statement, government policy acknowledges the need and central concern for a balance of technologies in the electricity generation mix. Accordingly, the Project will provide additional gas generation capacity to provide reliable, peaking generation, compliant with the provisions of **PPW Chapter 12**.

PPW Chapter 13 (and associated TANs)

- 6.3.7 A full EIA has been undertaken to assess the potential effects of the Project and provide appropriate mitigation where required, as explained in the ES (Document Reference 6.1), in accordance with **PPW Chapter 13**. A number of embedded mitigation measures implicit to the design of the Project and its construction and operation have been incorporated as set out in the Outline CEMP (Document Reference 6.2, Appendix 3.1), Outline Surface Water Management Plan (Document Reference 6.2, Appendix 3.2) and Outline Landscape and Ecology Mitigation Strategy (Document Reference 6.2, Appendix 3.4). Chapters 15 and 16 of the ES (Document Reference 6.1) conclude that the residual effects of the Project upon socio-economics and public health are not significant. As such the Project is considered to be in accordance with PPW Chapter 13.

PPW Chapter 14 (and associated TANs)

- 6.3.8 In regards to **PPW Chapter 14**, it is likely that the Project would prevent extraction of minerals whilst it is constructed. However, the Project would be decommissioned at the end of its useful lifespan (25 years) as secured by a requirement in the draft DCO (Document Reference 3.1), and the resources would thereafter be capable of being extracted. It is understood that there are no current or imminent prospects of these resources being extracted and substantial highway improvements would be required in order to facilitate any future mineral extraction.
- 6.3.9 **MTAN 1 and MTAN 2** set out detailed advice on the mechanisms for delivering policies for coal extraction, as explained at section 5.3 of this Planning Statement. As explained at section 6.2 of this Planning Statement, it is likely that the Project would prevent extraction of coal resources during construction; however, it is understood that there are no imminent prospects of these resources being extracted and the resources would be capable of extraction after decommissioning.

Other TANs

- 6.3.10 Appropriate consideration has been given to the Welsh language through the evolution of the Project and during consultation, as explained in the Consultation Report (Document Reference 5.1.0), in accordance with the principles of **TAN 20**. This has included provision of a range of consultation materials in Welsh language for statutory consultation as agreed in advance with CCS.

- 6.3.11 In accordance with **TAN 21**, wherever practicably possible waste will be avoided; however, where necessary, waste will be managed in accordance with the waste hierarchy. As set out in Chapter 15 of the ES (Document Reference 6.1), the Outline CEMP (Document 6.2.0, Appendix 3.1) will seek to apply the waste hierarchy – consisting of (in order of preference): prevention; re-use; recycling; other recovery (e.g. energy recovery); and disposal – during all phases of the Project as part of the waste prevention and management policy.

Draft Planning Policy Wales (Edition 10, February 2018) and associated Technical Advice Notes

- 6.3.12 The Welsh Government consulted on a draft Edition 10 of PPW between February and May 2018; however, this edition is at a relatively early stage of preparation and Edition 9 remains the latest adopted guidance. As with previous editions, PPW Edition 10 will be supplemented by a series of TANs and policy clarification letters. Draft Edition 10 of PPW reinforces the Welsh Government’s objectives in respect of the transition to a low carbon economy and the recognition of securing energy from a mix of energy sources.
- 6.3.13 In accordance with the provisions of draft Edition 10 of PPW, the Project responds to the need for new energy infrastructure to support the transition to a low carbon economy as explained in Chapter 4 of this Planning Statement. This section of the Planning Statement does not therefore consider the need for the Project further.

Wales Spatial Plan (2004, updated 2008)

- 6.3.14 The Project responds to identified need for energy infrastructure (as explained at section 4 of this Planning Statement), delivers positive economic benefits (as explained at Chapter 14 of the ES (Document Reference 6.1)), and seeks to limit adverse environmental impacts (as explained in the ES (Document Reference 6.1)), in accordance with the overall principles of the **Wales Spatial Plan** and the key priorities for the “*Swansea Bay – Waterfront and Western Valleys*” where the Project Site is located.
- 6.3.15 The construction of the Project would deliver benefits to the local economy, with a requirement for 25 to 122 construction workers on site during the peak construction period and projected annual delivery of £7.1 m GVA (a measure of the value of goods and services produced). The operational phase of the Project would provide up to an estimated 10 FTE direct jobs and provide approximately £0.55 m GVA per annum to the local economy. The Project would therefore support key priorities in the area of Swansea Bay – Waterfront and Western Valleys.

Environment Strategy for Wales (2006)

- 6.3.16 The Environment Strategy for Wales (2006) seeks to provide a framework to achieve a clean, healthy and biologically diverse environment which contributes to economic and social well-being and health. The Project has

had due regard to the aims of the **Environment Strategy for Wales** through high quality design, limiting environmental impacts through appropriate mitigation as required and by delivering positive economic benefits, as explained throughout the Design Principles Statement (Document Reference 10.2) and Environmental Statement (Document Reference 6.1).

6.4 Local Planning Policy

City and County of Swansea Unitary Development Plan (Adopted November 2008)

6.4.1 The UDP is the key local development plan document for the area, as referred to in section 5.4 of this Planning Statement.

6.4.2 With reference to section 5.4 of this Planning Statement, this section provides an assessment of the Project in respect of the UDP as set out in Table 6-4.

Table 6-4: CCS UDP Assessment

		Planning Statement Reference	
CCS UDP Policy Reference	Issue	Policy Requirement	Assessment
Site-Specific Policies			
R2	Coal	5.4.2	6.4.3
R4	Sand / Aggregates	5.4.2	6.4.3
R5	Crushed Rock	5.4.4	6.4.3
EV41	Hazardous Installations / Consultation Zones	5.4.3	6.4.4
Policies for Developments in Surrounding Area			
EC1	General Employment Sites	5.4.5	6.4.5 – 6.4.7
HC1	Housing Sites	5.4.6	
Other Relevant UDP Policies			
SP1, SP2, SP10, SP11, SP12	Strategic Policies	5.4.9 – 5.4.14	6.4.8 – 6.4.11
EV1, EV2, EV3, EV6, EV12, EV21, EV22, EV30, EV34,	Creating a Quality Environment	5.4.15 – 5.4.26	

		Planning Statement Reference	
CCS UDP Policy Reference	Issue	Policy Requirement	Assessment
EV35, EV38, EV40			
EC13	Rural Employment and Agriculture	5.4.27	
R16	Waste Management	5.4.28	
AS2, AS3, AS10	Improving Accessibility	5.4.29 – 5.4.31	

Site-Specific Policies

- 6.4.3 It is likely that the Project would prevent extraction of coal, sand and aggregate resources whilst it is constructed. However, the Project would be decommissioned at the end of its useful lifespan (25 years) as secured by a requirement in the draft DCO (Document Reference 3.1), and the resources would thereafter be capable of being extracted. It is understood that there are no current or imminent prospects of these resources being extracted and substantial highway improvements would be required in order to facilitate any future mineral extraction. The area is demonstrably suitable for power generation infrastructure and locating here would minimise the length of connections to the national gas and electricity networks and therefore construction impacts. As such the proposals are considered to be compliant with the provisions of **UDP Policies R2, R4 and R5**.
- 6.4.4 The Project Site is located adjacent to the south of a Hazardous Installation Consultation Zone and approximately 200 m to the north of a Notified High Pressure Mains Buffer. As explained in Chapter 15 of the ES (Document Reference 6.1), it is expected that no significant effects would occur in respect of public health, in accordance with **UDP Policy EV41**.

Developments in Surrounding Area

- 6.4.5 The Project Site is located 1.5 km north east of Felindre Strategic Business Park, allocated for 190 ha of employment land in **UDP Policy EC1** in order to meet the growth needs of the local economy. This is a brownfield site which possesses excellent accessibility and other features that will enable it to provide a valuable economic role in the locality and region by being developed for a range of employment uses. Were the Project to be located

at this allocated site, it could result in hazardous installation consultation zones being introduced that would limit the density of occupation of buildings nearby, and therefore the density/value of employment uses developed at the business park, besides the potential for amenity concerns. Therefore, it is considered by the Applicant to be unsuitable for the Project compared with the chosen Project Site.

6.4.6 The likely cumulative effects associated with the Project and other developments have been assessed as part of the EIA, with the findings presented in the ES (Document Reference 6.1), including in respect of Felindre Strategic Business Park and housing allocations set out in **UDP Policy HC1**.

6.4.7 Chapter 17 of the ES (Document Reference 6.1) concludes that the cumulative effects associated with the Project and other developments are minor adverse and therefore not significant.

Other Relevant UDP Policies

6.4.8 With regard to the Strategic Policies (in particular **Policies SP1, SP2 and SP3**), the Project:

- minimises its land take so far as practicable;
- is located away from homes and in an area of countryside that contains substantial amounts of energy infrastructure already; and
- has been integrated into that landscape through careful siting, layout, design and landscape mitigation commitments through implementation of the Design Principles Statement (Document Reference 10.2) and the Outline Landscape and Ecology Mitigation Strategy (Document Reference 6.2, Appendix 3.4), and Outline Landscape and Ecology Mitigation Plan (Document Reference 6.3, Figure 3.6) secured by requirements of the draft DCO (Document Reference 3.1).

6.4.9 APL has sought to employ good design at all stages of the Project's development, in accordance with **UDP Policies EV1, EV2, and EV40** of the UDP. This includes provision of replacement planting, provision of ponds and careful management of soils, pursuant to the Outline CEMP (Appendix 3.1 of Document Reference 6.2) and the Outline Landscape and Ecology Mitigation Strategy (Appendix 3.4 of Document Reference 6.2). Amenity is considered in the ES (Document Reference 6.1) particularly in respect of visual, noise and air quality changes, which could arise from the works during construction and operation on properties lying within approximately 1 km of the Generating Equipment Site. Chapter 17 of the ES (Document Reference 6.1) summarises that the construction of the Power Generation Plant would lead to moderate adverse effects upon visual amenity and minor adverse effects upon amenity in respect of transport which are not significant.

- 6.4.10 **UDP Policy EV21** notes that development will only be permitted if it is beneficial for the rural economy, or meets the overriding social or economic needs of a local community. The need for energy generation as discussed in Chapter 4 of this Planning Statement is clear and therefore the Project will meet the social and economic needs of the local community.
- 6.4.11 The Project Site is situated on low grade agricultural land and therefore development is compliant with **UDP Policy EC13**, which directs proposed development away from the higher grades of agricultural land.

Summary

- 6.4.12 The Project is in general compliance with relevant UDP policies. There remains a partial conflict with UDP Policies R2 and R4 (as a small proportion of these designations would be permanently sterilised by the pile foundations for the Generating Equipment), however, the permanent areas of loss are insignificant relative to the overall size of the designated areas. Overall the urgent need for electricity generation, including gas fired generating stations and flexible gas and peaking plants, should be accorded substantial weight, as set out in a range of national government guidance, national planning policy as well as local planning policy (as set out within section 4 of this report), including NPS EN-1, the Gas Generation Strategy (DECC, 2012) and the National Infrastructure Plan (HM Treasury, 2014).
- 6.4.13 This conclusion is based on section 104 of the PA 2008 which provides that, in making decisions on applications, the SoS must decide applications in accordance with relevant NPS(s) unless the adverse impacts of the proposal would outweigh its benefits (or in certain other limited circumstances); and, paragraph 3.1.3 of NPS EN-1 which states that all development consent applications for energy infrastructure should be assessed “*on the basis that the Government has demonstrated that there is a need for those types of infrastructure and that the scale and urgency of that need is as described for each of them in this Part*”, and states that the SoS “*should give **substantial weight to the contribution which projects would make towards satisfying this need when considering applications for development consent under the PA 2008***” (paragraph 3.1.4) [emphasis added].

City and County of Swansea Draft Local Development Plan (2017)

- 6.4.14 The LDP, upon adoption, will replace the UDP as the key planning policy document for CCS up to 2025.
- 6.4.15 With reference to section 5.4 of this Planning Statement, this section provides an assessment of the Project in respect of the draft UDP as set out in Table 6-5.

Table 6-5 CCS draft LDP Assessment

		Planning Statement Reference	
CCS LDP Policy Reference	Issue	Policy Requirement	Assessment
Site-Specific Policies			
RP12	Safeguarding Minerals	5.4.40	6.4.16 – 6.4.18
RP14	Mineral Buffer Zones	5.4.41	
CV2	Development in the Countryside	5.4.42	
Policies for Developments in Surrounding Area			
ER5	Landscape Protection	5.4.43	6.4.19 – 6.4.22
EU1	Renewable and Low Carbon Energy Developments	5.4.43	
SD1(G)	Strategic Development Areas	5.4.44	
SI4	Morrison Hospital	5.4.45	
RP7	Sustainable Waste Management	5.4.46	
SD-A, SD-C, SD-E	Strategic Development and Masterplanning	5.4.47	
H1.11, H1.21, H1.26, H1.30, H1.31	Housing	5.4.48	
Other Relevant LDP Policies			
PS1, PS2, PS4	Placemaking and Sustainable Development	5.4.52 – 5.4.54	6.4.23 – 6.4.36
IO1, IO2	Infrastructure Requirements and Obligations	5.4.55 – 5.4.56	
HC1, HC3	Historic and Cultural Environment	5.4.57 – 5.4.58	
SI1, SI8	Social Infrastructure	5.4.59 – 5.4.60	
ER1, ER2, ER6, ER8, ER9, ER10, ER11	Ecosystem and Resilience	5.4.61 – 5.4.67	

		Planning Statement Reference	
CCS LDP Policy Reference	Issue	Policy Requirement	Assessment
T1, T5, T7	Transport, Movement and Connectivity	5.4.68 – 5.4.70	
EU1	Energy and Utilities	5.4.71	
RP1, RP2, RP3, RP4, RP5, RP6, RP9	Resources and Public Health Protection	5.4.72 – 5.4.78	

Site-Specific Policies

- 6.4.16 With regard to **draft LDP Policy RP12**, it is likely that the Project would prevent extraction of coal, sand and gravel resources whilst it is constructed. However, as stated above, the Project would be decommissioned at the end of its useful lifespan (25 years) as secured by requirements set out in the draft DCO (Document Reference 3.1), and the resources would thereafter be capable of being extracted and not permanently sterilised. It is also understood that there are no current or imminent prospects of these resources being extracted, and any extraction would require substantial highway improvements.
- 6.4.17 As set out above and in the ES (Document Reference 6.1), careful consideration has gone into the layout and location of the Project to ensure there are no significant adverse effects on natural heritage, landscape and the amenity and well-being of neighbouring properties, in accordance with **draft LDP Policy RP14 and ER5**.
- 6.4.18 The Applicant has made extensive efforts to integrate the Project into the local and wider landscape, in accordance with **draft LDP Policy ER 5** through measures including: the selection of OCGT technology with one stack, the alignment of the larger plant items to minimise impacts from long distance views, the location in lower topography in the local context, and the retention of existing field boundaries around the Generating Equipment Site and Laydown Area.

Policies for Developments in Surrounding Area

- 6.4.19 To the south west, the Generating Equipment Site is located within 1.4 km of a Strategic Development Area (**Policy SD 1(G)**) which seeks to allocate a new settlement at land north west of M4 J46 (Llangyfelach). Several other site allocations are within the proximity of the Project Site and include land south of Glanffrwd Road for residential led development of up to 720 dwellings located approximately 6 km from Generating Equipment Site

(**Policy SD A**), land south of A4240 for residential led mixed use development of up to 750 dwellings located approximately 4 km from Generating Equipment Site (**Policy SD C**), and land north of Clasemont Road for residential led mixed use development of up to 675 dwellings located approximately 1.5 km from Generating Equipment Site (**Policy SD E**). It is considered that due to the appropriate siting of the Project and associated mitigation, the Project would not impede the implementation of the strategic allocations.

- 6.4.20 The Project Site is also within the proximity of safeguarded land at Morriston Hospital (**Policy SI 4**), located approximately 900 m to the south of the Generating Equipment Site. The policy notes that new healthcare related uses are required to deliver new and enhanced highway infrastructure. Although the Project Site isn't within the safeguarded area, the Project includes a new access road to resolve road capacity issues to Morriston Hospital from the roundabout immediately north of M4 J46.
- 6.4.21 The likely cumulative effects associated with the Project and other developments have been assessed as part of the EIA, with the findings presented in the ES (Document Reference 6.1), including in respect of the draft strategic site allocations and housing allocations set out in UDP Policy HC1.
- 6.4.22 Chapter 17 of the ES (Document Reference 6.1) concludes that the cumulative effects associated with the Project and other developments are minor adverse and therefore not significant.

Other Relevant LDP Policies

- 6.4.23 As noted in Chapter 4 of this Planning Statement, the need for the Project is clear and therefore it can be considered as "*necessary infrastructure provision*" on a brownfield site within the countryside, in accordance with **draft LDP Policies PS1 and PS2**.
- 6.4.24 In accordance with **draft LDP Policies PS2 and HC1**, the Applicant has sought to employ good design principles at all stages of the Project's development and has undertaken appropriate studies of local habitats, potential access routes heritage features and landscape to enable the design to respond to place, whilst ensuring that it can function as required.
- 6.4.25 Chapter 13 (Document Reference 6.1) on the potential impacts of the Project on the historic environment. As set out in the ES, it is anticipated that no significant impacts on archaeology or cultural heritage are expected as a result of the Project, in accordance with **draft LDP Policy HC2**, and thus no mitigation measures are considered necessary.
- 6.4.26 As detailed in Chapter 14 (Socio-economic) of the ES (Document Reference 6.1), the Project will have several beneficial impacts including supporting construction employment and the possibility of enhanced employment

opportunities through linkages with employability programmes and colleges, in accordance with **draft LDP Policies PS4 and IO2**.

- 6.4.27 With regard to **draft LDP Policies IO1 and T1**, the Project proposes a new purpose built Access Road (adhering to design principles) to the Generating Equipment Site from the B4489, to be formed by upgrading an existing access road. APL has consulted with National Grid on these changes and the use of the existing access road has been agreed as presented in the Outline CTMP (Document Reference 6.2, Appendix 3.3). The Outline CTMP (Document Reference 6.2, Appendix 3.3) provides a framework for addressing the transport issues associated with construction of the Project.
- 6.4.28 In relation to Air Quality, with the measures adopted in the Outline CEMP (Document Reference 6.2, Appendix 3.1) dust and particulate health risks should not arise, in accordance with **draft LDP Policies SI1, RP1 and RP2**, due to the adequate dispersion provided by the proposed stack height and other associated mitigation measures that the Project proposes. In relation to noise, noise surveys undertaken at locations agreed with CCS and the Outline CEMP (Document Reference 6.2, Appendix 3.1) will minimise residual impacts during construction to non-significant levels, in accordance with **draft LDP Policies SI1, RP1 and RP2**. Regarding pollution and contamination, groundwater and worker health impacts are not expected either during construction with the Outline CEMP implemented (Document Reference 6.2, Appendix 3.1) or during operation in accordance with **draft LDP Policies SI1, RP1 and RP2**.
- 6.4.29 A number of Project alternatives have been assessed by the Applicant, taking into account a range of environmental factors as set out in Chapter 5 of the ES (Document Reference 6.1), which include consideration of potential impacts of climate change and suitable mitigation measures in place where necessary, in accordance with **draft LDP Policy ER1**.
- 6.4.30 Several measures have been implemented to limit significant adverse effects on sites of nature conservation importance, ecological networks and habitats and Ancient Woodland, including the provision of replacement habitats, provision of wildlife ponds and replacement planting, in accordance with **draft LDP Policies ER6 and ER8**. Notwithstanding this, the Project will result in the loss of a small proportion of Ancient Woodland and broadleaved semi-natural woodland, as explained at Chapter 8 of the ES (Document Reference 6.1). The impacts of this are considered to be acceptable when weighed against the need and benefits of the Project.
- 6.4.31 Impacts on PROWs have been minimised as far as practicable in line with **draft LDP Policy T7**. The magnitude of impacts is anticipated to be low, as all users should still be able to make a pedestrian movement, but there will be some hindrance in doing so (e.g. due to short term closures/diversions). The significance of effect will therefore be moderate adverse, which is significant, however the effect will be temporary.

- 6.4.32 Following the implementation of the embedded mitigation measures and measures included in the Outline CEMP (Document Reference 6.2, Appendix 3.1) and Surface Water Management Plan (Document Reference 6.2, Appendix 3.2) it is concluded that water quality and resources impacts associated with the construction, operation and decommissioning phases are not significant and comply with good water resource management requirements and **draft LDP Policy RP3**.
- 6.4.33 With regard to **draft LDP Policy RP4**, a Flood Consequence Assessment (Document Reference 6.2, Appendix 9.1) has been undertaken and concludes that the Project will have a low or negligible impact on flooding in the wider area. It is also proposed that the Outline Drainage Strategy (Document Reference 6.2, Appendix E to the Flood Consequences Assessment) will adopt SUDS principles as set out in the SUDS Manual (CIRIA C697).
- 6.4.34 With regard to **draft LDP Policy RP5**, after implementation of good practice methods and mitigation measures such as working within and adhering to an Outline CEMP (Document Reference 6.2, Appendix 3.1), the potential effects in respect of contamination and landfill gas are considered to be negligible and therefore not significant.
- 6.4.35 With regard to **draft LDP Policy RP6**, the Applicant will undertake a comprehensive ground investigation prior to construction (as per requirements in the draft DCO (Document Reference 3.1)) which will inform the foundation design and any remediation required to be undertaken as required and as part of the embedded mitigation for the Project. Once mitigation has been taken into account, the magnitude of effect is considered to be negligible.
- 6.4.36 With regard to **draft LDP Policy RP9**, as set out in Chapter 15 of the ES (Document Reference 6.1), the Outline CEMP (Document Reference 6.2, Appendix 3.1) will control management of waste. The Outline CEMP (Document Reference 6.1) will ensure efficiency of resource use and compliance with waste legislation. All Hazardous waste will be segregated by type and from other waste streams. All waste oil will be stored in a bunded facility until such times that it is collected. Used filters, rags and absorbents will be stowed in the hazardous waste container in drums or waste oil bags.

Summary

- 6.4.37 The draft LDP holds some weight for the purposes of decision-making following recent examination hearings and taking into account the provisions of section 104 of the PA 2008 and paragraph 3.1.3 of NPS EN-1, however the weight to be attached to the draft LDP may change based upon the Inspectors' recommendations. In conclusion, the Project largely accords with the draft LDP and its aim to provide sustainable development.

Swansea Environment Strategy (2006)

6.4.38 It is considered that the SES is likely to be of relatively low importance to the determination of the Application, due to the primacy of the relevant NPS. Nonetheless the response of the Project to these themes and the 2020 Vision is set out in the table below.

Table 6-6 SES Vision and Project Response

Theme	2020 Vision	Project response
The Natural Environment and Biodiversity	Swansea's unique and diverse natural environment will be protected, enhanced and promoted to maximise social, economic and environmental well-being	The Project is located mainly on lower-grade agricultural land and will limit impacts upon existing habitats and biodiversity through embedded mitigation and mitigation measures set out in the Outline Landscape and Ecology Mitigation Strategy (Document Reference 6.2, Appendix 3.4)
The Built Environment and Energy Use	Swansea will have strong, sustainable and distinctive communities where everyone can enjoy a clean, safe and high-quality built environment with affordable housing, public spaces and considerately-designed and resource-efficient buildings	Not of direct relevance to the Project, although its siting has been selected in part to avoid effects on the amenity of residential areas.
Water, Land and Waste Management	Swansea's water resources, land and waste will be managed sustainably to maximise benefits for everyone and minimise risks to the environment and human health.	The Project is located mainly on lower-grade agricultural land and will have a minimal impact on the local environment and human health through its appropriate siting, low water/waste generating technologies selected for the generating equipment, and the implementation of the Outline CEMP (Document Reference 6.2, Appendix 3.1), Outline Drainage Strategy (Document

Theme	2020 Vision	Project response
		Reference 6.2, Appendix 9.1) and the Outline Landscape and Ecology Mitigation Strategy (Document Reference 6.2, Appendix 3.4)
Sustainable Transport and Air Quality	Swansea’s citizens will live near to work opportunities, leisure facilities and essential services, have access to a choice of convenient and efficient transport options, and enjoy clean air.	The Project will minimise its impacts on transport and has positive impacts on employment during construction and operation (see ES (Document Reference 6.1, Chapters 12 & 14)).
Environmental Awareness and Action	All people living in, working in and visiting Swansea will understand, respect and appreciate our environment and will participate in positive actions towards sustainability.	The Project will minimise construction and operational impacts on users of the footpaths near and bisecting the Project Site through the Outline CTMP (Document Reference 6.2, Appendix 3.3) and through planting pursuant to the Outline Landscape and Ecology Mitigation Strategy (Document Reference 6.2, Appendix 3.4) (each secured by a DCO requirement).

Swansea Local Biodiversity Strategy and Action Plan

6.4.39 The biodiversity chapter of the ES (Document Reference 6.1, Chapter 8) has considered the local and national BAP and it has informed the baseline and methodology for the assessment. Therefore it has been given appropriate regard in the EIA and therefore in the wider Application. The Project will limit impacts upon existing habitats and biodiversity through embedded mitigation and mitigation measures set out in the Outline Landscape and Ecology Mitigation Strategy (Document Reference 6.2, Appendix 3.4).

7 Likely Benefits and Adverse Impacts

7.1 Introduction

7.1.1 A consideration of the balance of benefits and adverse impacts of the Project is provided below in recognition of the decision-making framework set out in Section 104 of the PA 2008.

7.2 Likely Benefits

7.2.1 There are important benefits that need to be considered in respect of the Project, which are balanced against the potential adverse impacts as outlined below.

7.2.2 Considerable weight needs to be attributed to the urgent need for increased electricity generation capacity, including gas-fired generating stations and gas-fired peaking plants, as outlined in NPS EN-1, the Gas Generation Strategy (DECC, 2012), the National Infrastructure Plan (HM Treasury, 2014), and Energy Wales – a Low Carbon Transition (Welsh Government, 2012).

7.2.3 The Project would contribute materially to the short- and medium-term needs for flexible, reliable, peak load power generation and facilitate the transition to a low carbon economy. The chosen technology for a peaking plant would help to 'balance out' the grid at times of peak electricity demand and help to support the grid at times when intermittent renewable sources cannot generate sufficient electricity.

7.2.4 PPW Chapter 7 notes that the construction and energy sectors represent economic development. The construction and operation of the Project would benefit the Welsh economy, with projected annual delivery of £7.1 million Gross Value Added (GVA) (a measure of the value of goods and services produced) during the construction period of the Project, which is expected to commence in 2020. It is estimated that the peak construction period would require 25 to 122 construction workers on site, and during operation, the Project is estimated to provide 10 additional FTE direct jobs (Chapter 14 of the ES (Document Reference 6.1)).

7.2.5 The Power Generation Plant has been laid out to minimise impacts on biodiversity and provide all reasonable opportunities to retain or create valuable new habitats. A Landscape and Ecology Management Plan (Document Reference 6.2) forms part of the Application and is secured by requirements of the draft DCO (Document Reference 3.1).

7.2.6 The Project demonstrates good design whilst also remaining functional and durable for its lifespan and being safe, accessible and of sustainable construction, as explained in the Design Principles Statement (Document Reference 10.2), the Landscape and Ecology Management Plan (ES Figure 3.6, Document Reference 6.3) and the Works Plans (Document Reference

2.3). The Consultation Report (Document Reference 5.1.0) demonstrates that advice on design matters has been taken into account throughout the design process.

7.3 Likely Adverse Impacts

- 7.3.1 NPS EN-1 and EN-2 identify that energy infrastructure development, including fossil fuel generating stations, are expected to have adverse impacts in relation to: air quality and emissions, biodiversity and geological conservation, flood risk, the historic environment, landscape and visual amenity, land use/land take, noise and vibration, socio-economics, traffic and transport, waste, and water quality and resources.
- 7.3.2 Accordingly, the ES (Document Reference 6.1) presents the findings of full EIA which has been undertaken to consider the effects of the Project, in respect of: air quality; noise and vibration; ecology; water quality and resources; geology, ground conditions and hydrogeology; landscape and visual; traffic, transport, and access; historic environment; and socio-economics.
- 7.3.3 As explained in the ES (Document Reference 6.1), the Project has been designed to incorporate embedded mitigation in order to minimise the likely adverse impacts as far as reasonably possible. This includes measures set out in the Outline CEMP (Document Reference 6.2, Appendix 3.1), Outline CTMP (Document Reference 6.2, Appendix 3.3) and Landscape and Ecology Mitigation Strategy (Document Reference 6.2, Appendix 3.4).
- 7.3.4 There are expected to be significant effects on visual amenity from 5 viewpoints and minor adverse effects (which are not significant) on noise, ecology, traffic and water resources during construction. However, these effects would be minimised through mitigation measures with the implementation of the outline CEMP (Document Reference 6.2, Appendix 3.1) and the Outline CTMP (Document Reference 6.2, Appendix 3.3), which are secured by requirements in the draft DCO (Document Reference 3.1).
- 7.3.5 The Project is expected to have a moderate effect on ecology during construction through the permanent loss of Ancient Woodland. However, only a narrow strip of ancient woodland is to be removed. As outlined in the Landscape and Ecological Management Plan (Document Reference 6.2, Appendix 8.14), APL is committed to delivering high quality, deliverable mitigation through provision of replacement woodland/scrub planting. Implementation of these measures is secured by requirements set out in the draft DCO (Document Reference 3.1).
- 7.3.6 During operation, the Project is expected to have some significant effects experienced by viewpoints representative of residential and recreational receptors within close proximity (700 m) to the Project Site where the landscape mitigation planting would not be able to reduce the significant effects experienced. However it is notable that the locality is generally suitable for energy infrastructure, containing several energy infrastructure

projects, tall overhead lines, and substations, and it is considered that all reasonable efforts have been taken in the siting, layout and design commitments to minimise residual impacts, as set out in the Landscape and Ecology Mitigation Strategy (Document Reference 6.2, Appendix 3.4), the Outline Lighting Strategy (Document Reference 6.2, Appendix 3.5) and the Design Principles Statement (Document Reference 10.2), each secured by requirements set out in the draft DCO (Document Reference 3.1).

- 7.3.7 It is acknowledged that permanent components of the Project are located on limited parts of the areas designated under UDP Policies R2 (Coal) and R4 (Sand/Aggregates), and draft LDP Policy R12 (Sand and Gravel). However, the impact on sand/aggregates is considered to be limited by reference to the overall physical area directly affected and most of the impact would be reversible after decommissioning. The impact on coal resources is limited by means of siting the Project close to areas of existing and recently consented major infrastructure which give rise to similar effects. It is further considered that recent UK government policy decisions substantially reducing the role of coal weigh in favour of the Project given the need to ensure future security of electricity supply.
- 7.3.8 The Project will result in some adverse residual effects, as set out within chapter 16 of the ES (Document Reference 6.1) particularly during construction, in relation to: landscape and visual amenity from a number of viewpoints, traffic during the peak hour, loss of and disturbance to habitats, noise at sensitive receptors, water quality and mineral resources. The Project will also result in some adverse residual effects during operation, particularly in relation to noise and operational lighting from the Power Generation Plant and landscape and visual amenity from a number of viewpoints. However, all residual effects during construction and operation are considered to be minor adverse, with exception of moderate adverse effects on footpaths during construction and moderate to major adverse landscape and visual effects.
- 7.3.9 In summary, whilst some adverse impacts are likely, they are of a nature that are inherently likely for fossil fuel generating stations, and as such are anticipated in relevant guidance and policy (particularly NPS EN-2). The Applicant has fully assessed the likely adverse effects of the Project throughout the pre-application process and extensive consultation undertaken, and all reasonable mitigation has been identified and secured in the draft DCO (Document Reference 3.1).

8 Conclusions

8.1 Summary

- 8.1.1 APL proposes to construct and operate an OCGT peaking Power Generation Plant and new connections to the gas and electricity networks on land adjacent to the Felindre Gas Compressor Station at Abergelli Farm, Felindre, Swansea SA5 7NN. APL is applying to the SoS for BEIS under section 31 of the PA 2008 for a DCO for powers to construct, operate and maintain the Power Generation Plant. In addition, APL is seeking powers of compulsory purchase in respect of acquisition over the Order Land, in order to facilitate the construction and operation of the Project.
- 8.1.2 This Planning Statement has been produced as part of a suite of documents accompanying APL's application to the SoS for BEIS for a DCO. The Planning Statement acts as the primary reference document for an explanation of the planning issues pertinent to the Application, with regard to the relevant National Policy Statements and other important and relevant matters. The Planning Statement explains how the Project complies with the relevant National Policy Statements and other, policy considerations.
- 8.1.3 Separately, APL will seek planning permission for the Gas Connection under the TCPA 1990 and the Electrical Connection under either the TCPA 1990 or as permitted development under the GPDO.
- 8.1.4 The urgent need for electricity generation, including gas fired generating stations and flexible gas and peaking plants, is provided in NPS EN-1, the Gas Generation Strategy (DECC, 2012), Energy Wales – a Low Carbon Transition (Welsh Government, 2012) and the National Infrastructure Plan (HM Treasury, 2014). The Project would contribute materially to meeting this need.
- 8.1.5 The Project will achieve the relevant objectives of the applicable National Policy Statements, being NPS EN-1 and NPS EN-2. Considerations as to siting, Habitats and Species Regulations, alternatives, good design, consideration of Combined Heat and Power, grid and gas connections, safety, health, nuisance and security, amongst other matters, have been given due regard as demonstrated in the ES (Document Reference 6.1) and its appendices (Document Reference 6.2), the Design Principles Statement (Document Reference 10.2), this Planning Statement (Document Reference 10.1), the Grid Connection Statement (Document Reference 9.1) and the Gas Connection Statement (Document Reference 9.2).
- 8.1.6 The ES (Document Reference 6.1) has also assessed all relevant likely significant environmental effects and has proposed appropriate mitigation wherever feasible. This is to be secured through compliance with various submitted documents and further approvals such as under the proposed requirements attached to the draft DCO (Document Reference 3.1).

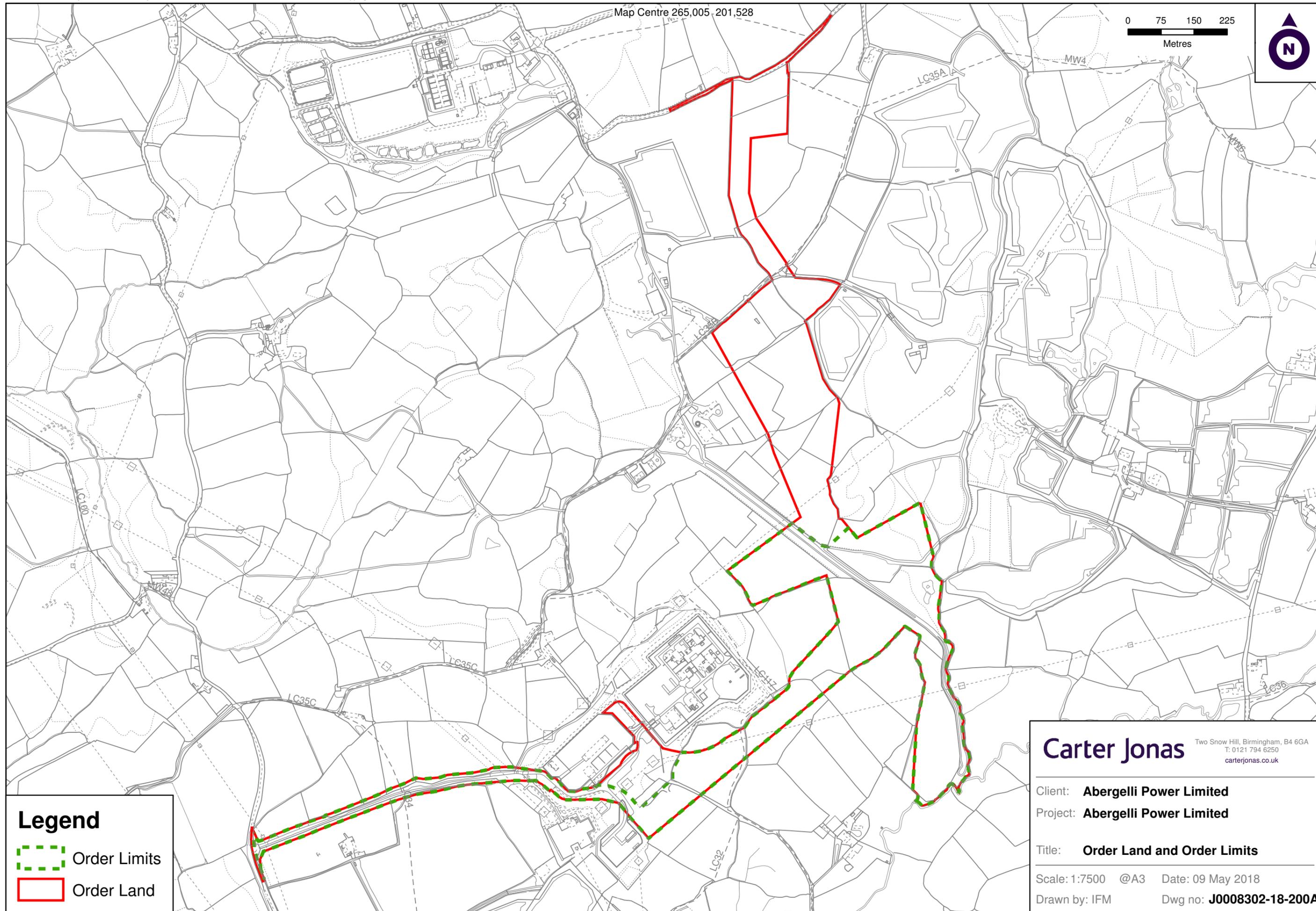
- 8.1.7 It is considered that, on balance, the likely benefits of the Project significantly outweigh any potential adverse impacts. These benefits include (amongst others), the local and regional economic benefits, and the considerable public benefit to meeting the national need for flexible electricity generation.
- 8.1.8 The Project would allow for the rapid, reliable and viable provision of reserve capacity to the National Grid, supporting the transition to a low carbon economy by balancing some of the considerable scale of intermittent sources such as wind being developed UK-wide, and playing an important role in meeting the UK's national energy requirements. The Project would therefore deliver significant national benefits.
- 8.1.9 In this respect, the Project should be considered in light of paragraph 3.1.4 of NPS EN-1, which states that, "*[t]he [SoS] should give substantial weight to the contribution which projects would make towards satisfying [the urgent need for energy infrastructure] when considering applications for development consent under the [PA 2008]*".
- 8.1.10 The Applicant has maintained dialogue throughout the pre-application period with local authorities, political representatives and other consultees and regulators, and will continue to do so at all relevant stages prior to operation, if the Order is made.
- 8.1.11 There are considered to be no likely significant effects in respect of sites designated under the Habitats Directive as set out in the No Significant Effects Report (Document Reference 5.5), nor species protected thereunder as set out in the ES (Document Reference 6.1, Chapter 8).
- 8.1.12 Paragraph 4.1.2 of NPS EN-1 confirms a presumption in favour of granting consent to applications for energy NSIPs. That presumption applies unless any more specific and relevant policies set out in the relevant NPSs clearly indicate that consent should be refused. It is the Applicant's view that there are no other policy reasons why consent should be withheld. The Applicant does not consider that there are any other important or relevant considerations including national planning policy or local development plan policies which require an alternative position to be taken.
- 8.1.13 It is our conclusion that, having regard to the requirements of section 104 of the PA 2008 there is a compelling case in the public interest for the Order to be made in the terms proposed.

Annexe

Drawing No. J0008302-18-200A: Order Land and Order Limits

Map Centre 265,005 - 201,528

0 75 150 225
Metres



Legend

-  Order Limits
-  Order Land

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Client: **Abergelli Power Limited**
Project: **Abergelli Power Limited**

Title: **Order Land and Order Limits**

Scale: 1:7500 @A3 Date: 09 May 2018
Drawn by: IFM Dwg no: **J0008302-18-200A**